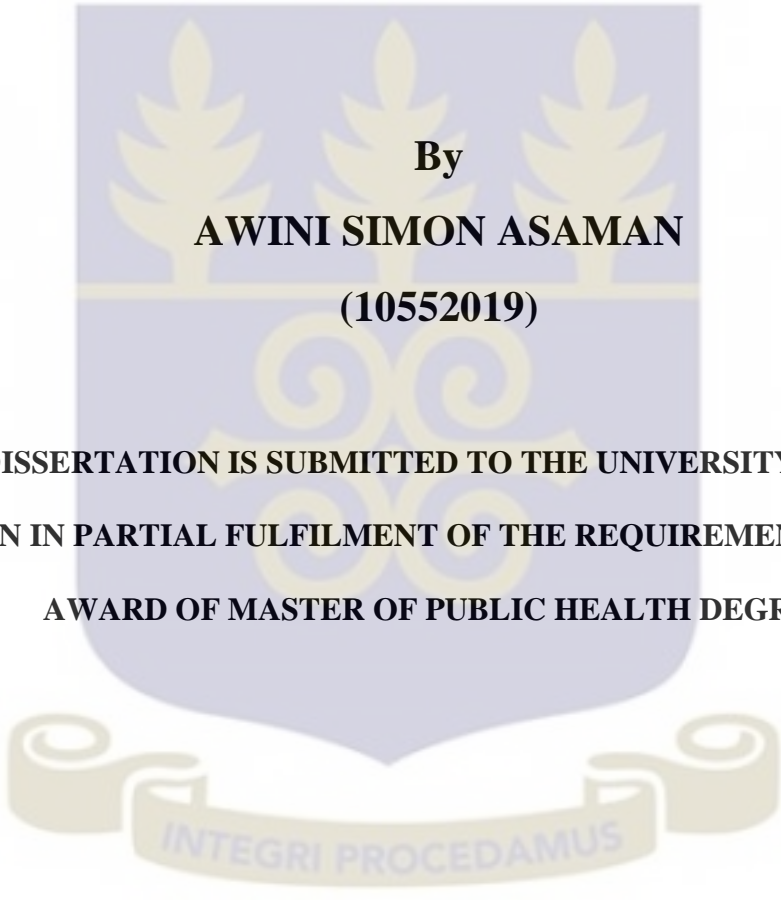


**SCHOOL OF PUBLIC HEALTH
COLLEGE OF HEALTH SCIENCES
UNIVERSITY OF GHANA**

**AN EXPLORATORY STUDY ON LEVEL OF COMPETENCY ON
MENTAL DISORDERS AMONG POLICE OFFICERS' SWAT
UNIT IN THE ACCRA METROPOLIS**



**By
AWINI SIMON ASAMAN
(10552019)**

**THIS DISSERTATION IS SUBMITTED TO THE UNIVERSITY OF GHANA,
LEGON IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE
AWARD OF MASTER OF PUBLIC HEALTH DEGREE**

JULY, 2016

DECLARATION

I, Awini Simon Asaman, hereby declare that except for the other people's works which have been duly acknowledged, this dissertation is an original work produced by me under the guidance and supervision of Dr. Abdallah Ibrahim. This work has not been previously submitted elsewhere either in whole or in part for the award of any degree.

.....
AWINI SIMON ASAMAN
(STUDENT)

.....
DATE

.....
Dr. ABDALLAH IBRAHIM, CPH
(SUPERVISOR)

.....
DATE

INTEGRI PROCEDAMUS

DEDICATION

This work is first and foremost dedicated to God Almighty for His protection and guidance throughout the period of the study. I further dedicate this dissertation to my mother, Atiiga Awini and late father, Mr. Apana Awini.



ACKNOWLEDGEMENT

I wish to thank the Almighty God for His Divine protection and strength throughout this program. I would also like to express my profound gratitude to Dr. Abdallah Ibrahim, CPH, my supervisor for his patience, guidance and understanding throughout this course.

My heartfelt thanks go to the head of Policy Planning and Management Department, Dr. Reuben Esena and Prof. Moses Aikins including the entire lecturers of the department for their encouragement and support.

I also acknowledge the assistance provided by Rev. David Nenyi Ampah-Bennin (Deputy Commissioner of Police), Director-General Public Affairs of the Ghana Police Service, and the entire police officers in the SWAT unit.

I wish to thank my brothers and all those who gave me the strength, hope and the faith I needed to see this work through.

Finally, I want to show my appreciation to my lovely wife, Patricia Akurugu and son, Godwin Awinpang for their support, prayers and understanding.

God bless you all.

The dissertation received financial support from the Christian Health Association of Ghana (CHAG) through the CHAG/DFID mental health Dissertation Grant and is duly acknowledged.

TABLE OF CONTENTS

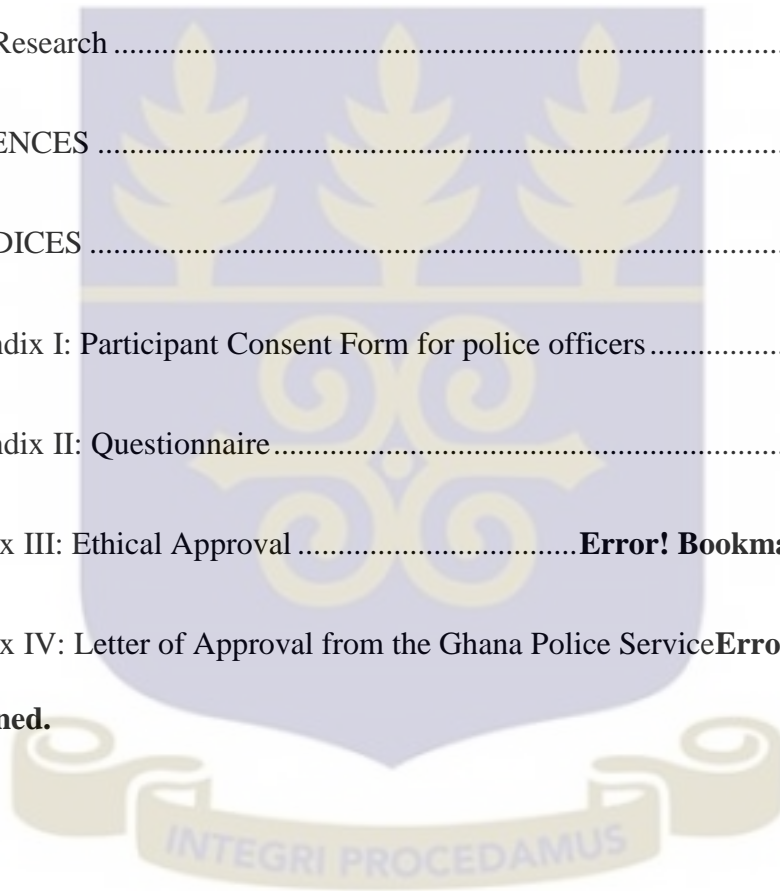
DECLARATION	i
DEDICATION	ii
ACKNOWLEDGEMENT	iii
TABLE OF CONTENTS	iv
LIST OF TABLES	ix
LIST OF FIGURES	x
LIST OF ABBREVIATIONS	xi
OPERATIONAL DEFINITION OF TERMS	xii
ABSTRACT	xiii
CHAPTER ONE	1
INTRODUCTION	1
1.1 Background of Study	1
1.2 Problem Statement	3
1.3 Conceptual Framework	5
1.4 Justification	7
1.5 Objectives of the Study	9
1.5.1 General Objective	9
1.5.2 Specific Objectives:	9

CHAPTER TWO	10
LITERATURE REVIEW	10
2.1 Mental Health.....	10
2.2 Mental Disorders	10
2.3 Competency on mental disorders	12
2.4 Ghana Police Force	13
2.5 Global Prevalence of Mental Disorders	14
2.6 Prevalence of Mental Health Disorders in Africa	14
2.7 Prevalence of Mental Disorders in Ghana.....	15
2.8 Police and Competency on Mental Disorders	16
2.9 Police and Competency on Mental Disorders in Canada.....	17
2.10 Police and Competency on Mental Disorders in United States of America	18
2.11 Police and Competency on Mental Disorders in United Kingdom (UK)	20
2.12 Police and Competency on Mental Disorders in South Africa	23
2.13 Police and Competency on Mental Disorders in Nigeria.....	23
2.14 Police Competency on Mental Disorders in Ghana	24
CHAPTER THREE	26
METHODS	26
3.1 Introduction	26

3.2 Study Area.....	26
3.3 Study Design	27
3.4 Study population	28
3.5 Variables.....	28
3.5.1 Dependent Variable	28
3.5.2 Independent Variable.....	28
3.5.3 Controlling variables	29
3.6 Sampling.....	29
3.6.1 Sample Size Determination	29
3.6.3 Sampling Method/Procedure	30
3.7 Data Collection Tools and Techniques	30
3.8 Data Quality Control	30
3.9 Pre-test or pilot study	31
3.10 Data management and Analysis	31
3.11 Ethical Considerations.....	32
CHAPTER FOUR.....	34
RESULTS	34
4.0 Introduction	34
4.1 Participant Characteristics.....	34

4.2 Psychiatric training of Police Officers	37
4.3 Awareness of Mental Health Facilities	37
4.4 Awareness of Mental Disorders	38
4.5 Knowledge of symptoms of Mental Disorders	39
4.6 Knowledge of Risk Factors Associated with People with Mental Disorders	41
4.7 Characteristics and of Awareness of Mental Disorders	42
CHAPTER FIVE	48
DISCUSSION	48
5.0 Introduction	48
5.1.0 Awareness of Mental Disorders	48
5.1.1 Awareness of Drug/substance abuse and Self-harm/ suicide	49
5.1.2 Awareness of Depression and Epilepsy.....	50
5.1.3 Awareness of Schizophrenia and psychosis	50
5.1.4 Awareness of Personality and Mood Disorders	51
5.2 Knowledge of symptoms of mental disorders.....	51
5.3 Knowledge of risk factors associated with handling people with mental disorders	52
5.4 Participants characteristics	53
CHAPTER SIX.....	54

CONCLUSIONS AND RECOMMENDATIONS	54
6.1 Conclusions	54
6.2 Recommendations	54
6.2.1 Training	54
6.2.2 Policy	55
6.2.3 Research	55
REFERENCES	56
APPENDICES	61
Appendix I: Participant Consent Form for police officers	61
Appendix II: Questionnaire	64
Appendix III: Ethical Approval	Error! Bookmark not defined.
Appendix IV: Letter of Approval from the Ghana Police Service	Error! Bookmark not defined.



LIST OF TABLES

Table 1: Background characteristics of SWAT police officers	36
Table 2: Knowledge of symptoms of mental disorders	41
Table 3: Association between background characteristics and awareness of substance use	43
Table 4: Association between background characteristics and awareness of schizophrenia	44
Table 5: Multiple logistic regression analysis of substance use by independent variables	47



LIST OF FIGURES

Figure 1: Conceptual Framework of the Study.....	5
Figure 2: Map of Accra Metropolis	27
Figure 3: Psychiatric Training of Officers	37
Figure 4: Awareness of mental health facilities.....	38
Figure 5: Awareness of mental disorders.....	39
Figure 6: Knowledge on Risk Factors associated with handling people with mental disorders.....	42



LIST OF ABBREVIATIONS

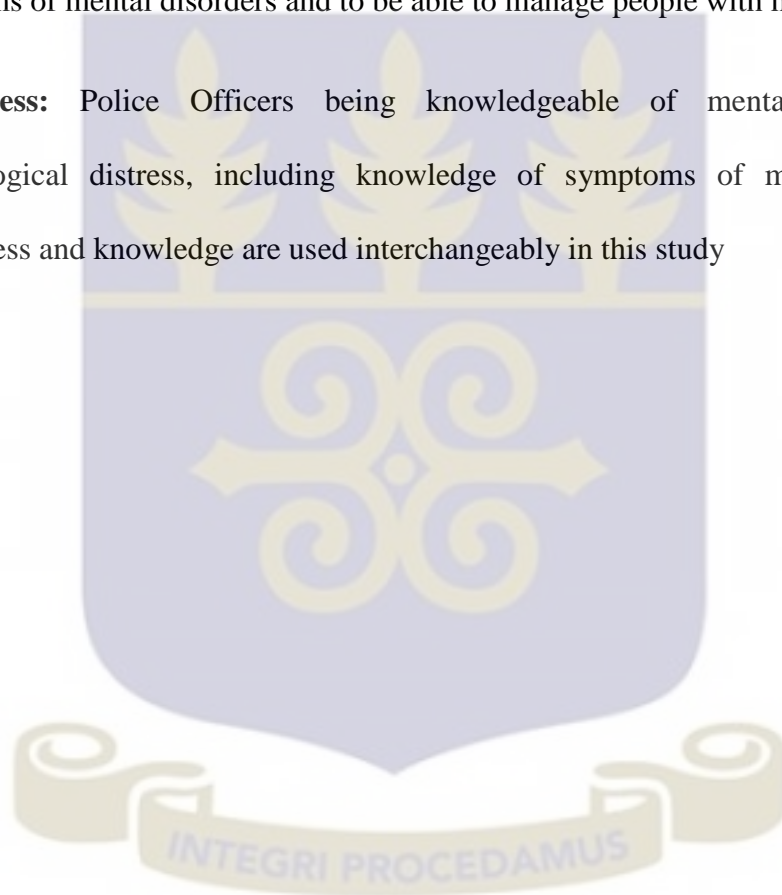
ACPO	Association of Chief Police Officers
APA	American Psychiatric Association
CAMH	Centre for Addiction and Mental Health
CIT	Crisis Intervention Treatment
CMH	Commission for mental Health
GBD	Global Burden of Disease
GSS	Ghana Statistical Service
MHCC	Mental Health Commission of Canada
MHFA	Mental Health First Aid
NGO	Non-Government Organization
OPD	Outpatient Department
SAPS	South Africa Police Service
SWAT	Specialized Weapon and Tactics
TEMPO	Training and Education about Mental illness for Police Officers
WHA	World Health Assembly
WHO	World Health Organization

OPERATIONAL DEFINITION OF TERMS

Cultural competence is the ability to interact effectively with people from diverse backgrounds and groups and respond to people with special needs in the populations (Bhui, Warfa, Edonya, Mckenzie, & Bhugra, 2007).

Competency: In line with the definition by Bhui, et al. (2007), competency will be defined as the ability of police officers to positively identify mental disorders and symptoms of mental disorders and to be able to manage people with mental disorders.

Awareness: Police Officers being knowledgeable of mental disorders or psychological distress, including knowledge of symptoms of mental disorders. Awareness and knowledge are used interchangeably in this study



ABSTRACT

On daily basis, the police force in Ghana interacts with people, including those with mental disorders. This is one of the biggest challenges facing the police service as high expertise is required of anyone who deals with people with mental disorders. It is unfortunate though that this area remains grey and seems to be given little attention in Ghana. Several reports have also lamented the existence of very little or no scientific literature on the subject of police services` strategies in dealing with people with mental health disorders. This exploratory cross-sectional study thus sought to explore the level of competency on mental disorders among police officers in Ghana. It also explored whether officers have the capacity to identify risk factors associated with handling people with mental disorders. Systematic random sampling technique was used to select police officers for this study. The Special Weapon and Tactics (SWAT) unit was the study population. The data were processed and analysed using Microsoft Excel 2013 and STATA software version 13. Chi square was used to test the associations between the variables and odds ratio for the strength of associations. The study found very low proportion (9.5%) of police officers have ever heard of all the types of mental disorders commonly diagnosed in Ghana. Majority (97%) of the police officers were unable to mention any symptom of all the type of mental disorders commonly diagnosed in Ghana and less than 1% of them mentioned a minimum of five risk factors associated handling of people with mental disorders. Educational level of officers was found to influence the level of awareness and competency of mental disorders among police officers. The study concluded that there is low level of general awareness and competency of mental disorders among SWAT police officers in the Accra Metropolis and recommends that regular training on mental disorders should be part of the training curriculum for the police officers.

CHAPTER ONE

INTRODUCTION

1.1 Background of Study

The Ghana police service was established in 1894 to maintain law and order, apprehend offenders, prevent and detect crime and maintain public order and the safety of persons and property. This is achieved by ensuring operational readiness and availability of trained police personnel for deployment at all times throughout the country. It is also mandated by the police to enforce the laws of the country and to ensure the safety of the citizens. The Police Service in Ghana is defined and empowered by the Police Service (Act 350). The Ghana police service was mandated by the 1992 Constitution article 200 and supported by the Police Service Act, 1970 (Act 350) to maintain internal security.

Mental health is an important part of health, and has been defined by WHO as “a state of well-being in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community (Friedli, 2005). Mental illness, on the other hand, refers to disability or morbidity due to mental, neurological and substance use disorders, which arise due to the genetic, biological and psychological make-up of individuals as well as adverse social conditions and environmental factors (Friedli, 2005). Mental disorder is characterized by clinically significant disturbance in an individual’s cognition, emotion regulation, or behaviour that reflects a dysfunction in the psychological, biological, or developmental processes underlying mental functioning (APA, 2013).

Mental disorders contribute significantly to the disease burden in the world. The effects of mental disorders cut across the people of all race, ethnic and cultural groups as well as socioeconomic status. Mental health constitute the overall health and well-

being of a person and therefore should be handled with the same care as the physical health (Alex, Singh, Alyethodi, & Deb, 2013).

With an increasing number of persons with mental health problems in the society, the police have become the frontline professionals who come into contact with these persons when they are in crisis. These are challenges that affect law enforcement. The police is first to decide whether persons with mental disorders will enter mental health institutions for treatment or enter criminal justice system when they commit a crime. The need for police officers to have knowledge in recognizing mental disorders and knowing how to handle people with mental health issues is emphasized (Cardinal & Laberge, 1999).

The police agency should therefore ensure that police personnel are adequately prepared for interactions with people with mental health issues in Ghana. The literature shows that all police officers who come into contact with people with mental health issues should be well prepared. The reason is that such preparations will not only help the people with mental health issues but also ensure that police officers protect themselves from harmful attacks. There is a strong indication that techniques on understanding mental health issues and their associated systems are some of the keys elements for success (Coleman & Cotton, 2010).

The ten top mental health disorders in the inpatient care in Ghana are substance abuse, schizophrenia, depression, acute organic brain syndrome, hypomania, manic depressive psychosis, schizo-affective psychosis, alcohol dependency syndrome, epilepsy and dementia (WHO, 2007).

1.2 Problem Statement

Increasingly, apparent interaction between the police and people with mental disorders remains the greatest challenge facing police agencies in most parts of the world (Coleman, Cotton, Psych, & Livingston, 2014).

The Ghana Police Service is an agency that is mandated to maintain peace and order in the country and this always exposes them to a lot of hazards generally created by others. These hazards have the potential to cause physical and emotional harm to the police officers. On daily basis, the police officers come into contact with so many people (including mental health patients) and are exposed to harm when investigating crimes, conducting searches, taking samples or even arresting suspects (Mayhew & Graycar, 1996). The police in Ghana are responsible for crowd control, checking illegal movement of persons and goods and providing general security on the highway, in residential areas and other public places.

The police are usually the first point of contact with the criminal justice system for most individuals in the country and there is an opportunity created through police relationship and intervention in the society to avoid future crimes. The police are responsible to provide safety for individuals and the public and to work closely with communities to find long term solutions to problems identified. This therefore exposes them to interaction with individuals, some of whom may have been diagnosed or undiagnosed with mental health issues.

The World Health Organization has estimated that about 650,000 out of 21.6 million people living in Ghana suffer from the severe form of mental disorders and an estimated 2,166,000 are suffering from moderate mental disorders at any point in time (WHO, 2007). Recent estimates using the 2014 population projection show that Ghana's population is about 27 million (GSS, 2014). It is estimated that

approximately 810, 000 of this estimated people suffer from severe mental disorders and another 2,700,000 people suffer from some form of mental disorders at any point in time. The current number of people with mental disorders is estimated by using the above estimation from the World Health Organization.

One in four people (25%) live with a mental disorder in any given year and some of them will come in contact with the police in one way or the other. They normally will encounter the police officers either as victims of crime, witnesses or as offenders. People with mental health crisis are more likely to be victims of crime than those who do not have mental health crisis. The Association of Chief Police Officers (APCO) has estimated that about 90 percent of prisoners have mental problems. Police officers play a crucial role in working with and supporting people with mental health problems (ACPO, 2013). The indirect impact of mental disorders to the police offices is enormous as they interact with the society and given the estimated number of people who may suffer from mental disorders in the country at any point in time.

In Ghana, it is estimated that more than half of prison inmates are suffering from mental disorders, particularly in Northern Ghana (Ibrahim, Esena, Aikins, O'Keefe, & McKay, 2015). The study estimated that, about 29% of the prison inmates suffer from severe mental disorders, 35% suffer from moderate mental disorders and 14% suffer from mild mental disorders (Ibrahim et al., 2015). This is an indication that the chance of the police force in Ghana coming into contact with people with mental disorders, especially through the criminal justice systems is very high.

There is limited literature on police regarding their competency or knowledge on mental health issues in Ghana. Of the more than 90 articles reviewed in this study, very few focused on the police and mental health awareness in the Sub-Saharan

Africa. There was no known article that focused on police and mental health issues in Ghana.

1.3 Conceptual Framework

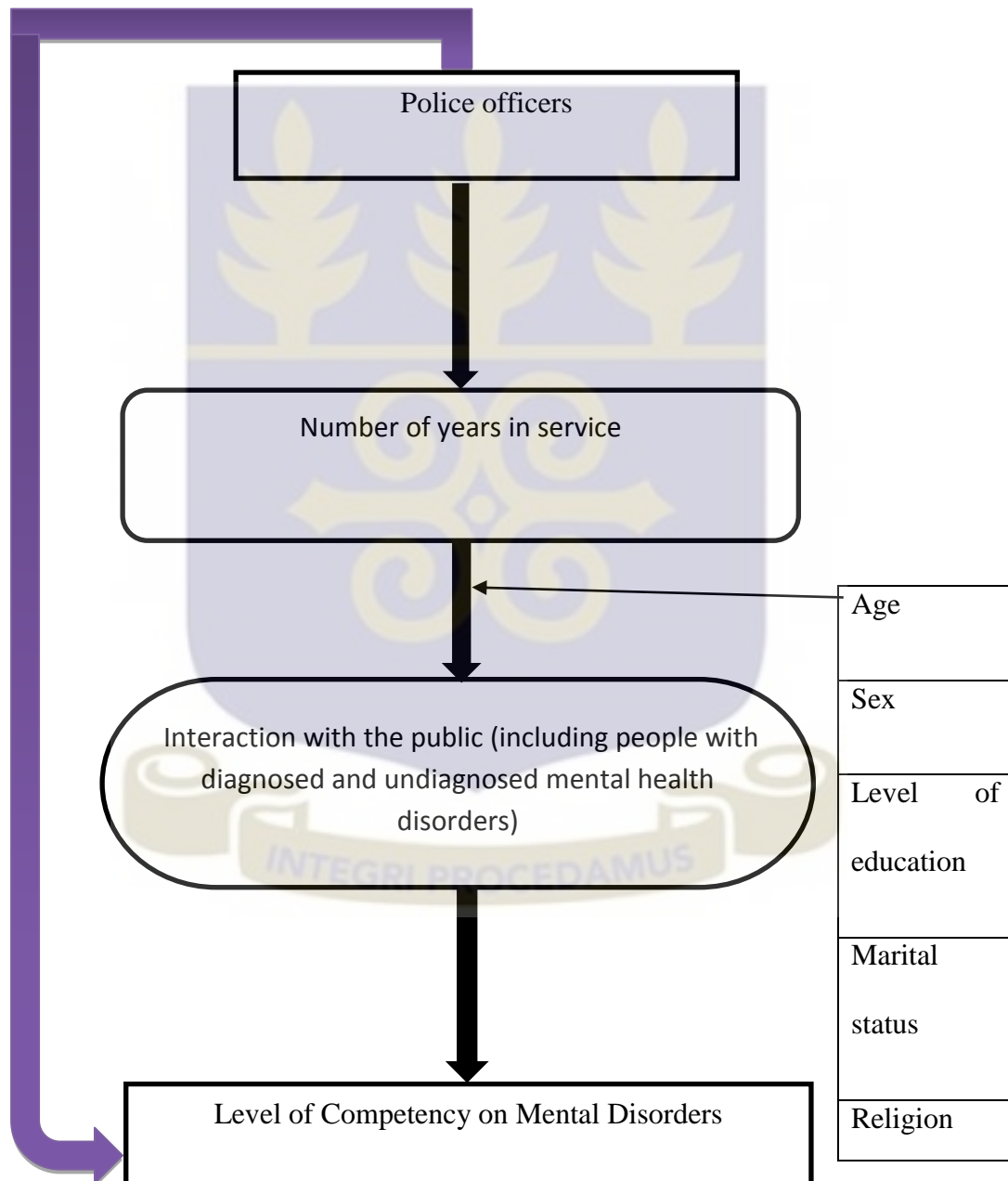


Figure 1: Conceptual Framework of Competency on mental disorders

Description of the Conceptual Model

Figure 1 illustrates the model of the study, showing the relationship among the variables of interest.

The police Officers, upon recruitment or appointment, serve in various units and departments. In line with their work, they are exposed to different kinds of people as they interact with the public. The level of exposure depends on the unit the individual officer serves and number of years in the service. These are modified or controlled by the educational level of the individual officer before joining the police service or after recruitment into the service. Religious teachings and beliefs of the individual officers also influences the way they interact with the public. Other controlling factors that modify the police interaction with the public include age, sex and marital status.

The police interaction with the public (including people with mental disorders either diagnosed or undiagnosed) leads them to some kind of experience about the people and environment in which they work. The level of competency on mental disorders among police officers is directly linked to the frequency (number of years in service) of interaction with people with mental health disorders and the unit that exposes officers to more the public.

The Special Weapon and Tactics is one of the units in the police service that exposes police officers more to the public. They become more aware of the society that they served as they stay long in the service. The level of competency on mental disorders among these officers are expected to be high as they interact people (including people with mental disorders) in daily basis.

1.4 Justification

The police officers' awareness and knowledge on mental health issues are becoming increasingly important in this country. This is because police officers are often the first responders called to duty when it comes to managing criminal offence and peace keeping. The police officers in Ghana play a critical role in situations where individuals are experiencing crisis, including those related to mental health. These, among other things put the police officers at risk when they come into contact with people with mental disorders, be it diagnosed or undiagnosed. If a person is in a place with acute distress, the possibility of police involvement is very high. The public interactions with the police is essential component of the police's daily work, however much attention is not given to the area (Cummings, Jones, Bradley, & Bradley, 2010). The studies find it challenging to generalize findings to all police services for some reason. It is not known whether the viewpoints of the police officers who did respond to distress call are different from officers who did not thus making it impossible to generalize. The needs of police officers depend on the needs and demographics of the communities where they serve, the activities of police service in one country may not be the same activities of the police service in another country. This calls for more research into police services in the various countries (Dougall & Dougall, 2014). The findings of this study would provide more insight into the interactions of the police officers with people with mental disorders in Ghana.

Having knowledge about mental disorders among the police officers will help reduce the impact of mental health crisis on the people in this country. The goal of this study was based on the grounds that adequate education and training of police on mental health issues would result in better police interactions with people, especially those with mental disorders. The police officers would focus on more proper way of

handling people with mental disorders instead of using force on them. This means that the police service must ensure that police officers are appropriately educated or trained to interact with people with mental disorders (Coleman & Cotton, 2010).

The study provides more insight into the issue of policing and mental health issues with regards to the Ghanaian situation. The study sought to bring out the issues of mental health and the risk of handling people with mental disorders by the police. The police officers interact with people with mental health issues in many ways and must make decision about how best to handle people with mental disorders. The police officers need to act very fast when they are dealing with persons that there is little or no information on their background. The police officers therefore need requisite knowledge to control and resolve their encounter with such persons.

The decisions that officers take have very good result for the safety of all the officers involved and persons with mental health illnesses in both mental health and criminal justice systems (Watson, Swartz, Bohrman, Kriegel, & Draine, 2014). The study would make recommendation on competency on mental disorders among the police and training of police on cultural competency on mental disorders.

In other parts of the world, including the United States America, Special Weapons and Tactics (SWAT) police officers are highly trained paramilitary units that tackle situations beyond the capability of conventional police forces. SWAT teams are called in when an incident presents significant risk to law enforcement officers or the public (Dees, 2016). Unlike the United States of America, the SWAT in Ghana is deployed in crowd control, checking illegal movement of persons and goods and providing general security on the highway, in residential areas and other public places. Again, SWAT is supposed to react quickly and decisively to avert crime, especially when the

criminal act is in progress. The Special Weapon and Tactics is therefore one of the units in the Ghana police service that is more exposed to the general public.

The finding of this study is useful to the police in the Greater Accra region and Ghana as whole.

1.5 Objectives of the Study

1.5.1 General Objective

To determine the level of competency and awareness on mental disorders among the SWAT unit of the Ghana police force

1.5.2 Specific Objectives:

1. To determine the level of knowledge among the SWAT unit of police officers about mental disorders, including symptoms of mental illnesses
2. To determine proportion of the SWAT unit of the police officers who are able to identify risk factors associated with handling individuals with mental illness



CHAPTER TWO

LITERATURE REVIEW

2.1 Mental Health

Mental health is not just lack of mental disorders as stressed in the World Health Organization (WHO) definition that “health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity”. Mental health focuses on the perceived self-efficacy, autonomy, competence and recognition of one’s ability to realize his or intellectual and emotional potential. Mental health is also defined as a state of well-being whereby individuals recognize their abilities, are able to cope with normal stresses of life, work productively and fruitfully, and make a contribution to their communities. For humans, mental, physical and social health are interconnected or closely linked such that the absence of one can pose a threat to the whole being. However, in most parts of world especially developing countries like Ghana, mental health and mental disorders are not given the needed attention as compared to physical health (WHO, 2003).

2.2 Mental Disorders

American Psychiatric Association defines mental disorder as a syndrome characterized by clinically significant disturbance in an individual’s cognition, emotion regulation, or behaviour that reflects a dysfunction in the psychological, biological, or developmental processes underlying mental functioning.

Schizophrenia spectrum and other psychotic disorders include schizophrenia, other psychotic disorders, and schizotypal (personality) disorder. They are defined by abnormalities in one or more of the following five domains: delusions, hallucination, disorganized thinking (speech), grossly disorganized or abnormal motor behaviour

and negative symptoms. Delusions are fixed beliefs that are not flexible to change even if there is better alternative. For example the beliefs that one is going to be harmed, harassed, and so on by an individual or group of people. Hallucinations are perception-like experiences that normally arise without any external motivation. Hallucinations are normally experienced as voices, either familiar or unfamiliar, that are perceived as different from the individual own thoughts. Disorganized thinking refers to the individual's speech where he or she may change from one topic to another without knowing and or provide answers to questions that may be indirectly related or completely unrelated. In fact the speech may be so severely disorganized that it is almost incomprehensible (APA, 2013).

Depression: the person experiences depressed mood, loss of interest and enjoyment, and reduced energy resulting to reduced activity for at least two weeks. Many people with depression also suffer from anxiety symptoms and undiagnosed somatic symptoms. People who suffer from moderate to severe forms of depression find it difficult to do their normal work, school, domestic and social activities as a result of symptoms of depression. Psychosis: people with psychosis are noted by distortions in their thinking and perceptions as well as narrowed range of emotions. Incoherent speech, hallucinations, delusions and unwarranted suspicion may occur. Abnormal behaviours, such as disorganized behaviour, agitation, excitement and inactivity or over activity may also occur. People who suffer from psychosis are at high risk of human rights violations. The characteristics of bipolar disorder are that the person's mood and activity levels are significantly disturbed. Persons with only manic episodes are also classified as persons with bipolar disorders. Epilepsy is characterized by recurrent unprovoked seizures. It is a chronic condition. Dementia is a syndrome which results from illness of the brain. It is also chronic and progressive in nature.

The characteristics of dementia are change in person's ability, personality and behaviour. People with dementia also have problems with their memory and skills needed to execute their daily activities. The conditions of different levels or patterns of alcohol intake can be presented as acute alcohol intoxication, harmful alcohol use, the alcohol dependence syndrome, and the alcohol withdrawal state (WHO, 2010).

2.3 Competency on mental disorders

Cultural competence is the ability to interact effectively with people from diverse backgrounds and groups. Agencies with cultural competency respond to people with special needs in the populations. Cultural competence included a set of skills or processes that allow mental health professionals to provide culturally appropriate services for the various populations (Bhui et al., 2007).

Police officers are supposed to provide services to communities while engaging in peaceful interactions with individuals from all cultural and ethnic backgrounds. The people on the other hand are expected to enjoy fair, equitable and safe law enforcement service from police agencies without excessive force being meted to them. Police officers with cultural competency understand the needs of citizens better and interact with individuals with regards to cultural competency in context (Fletcher, 2014).

The definition of cultural competency based on developing standards for agencies, organisations or individuals is to:

Maintain the daily understanding of the beliefs and conventions of the different cultural groups in the areas they served

Engage policies, practices and skills that promote and respect client's beliefs and conventions at workplace or during services rendered to clients

Employ self-assessment practices that brings continuous betterment in cultural responsive interaction (Glick, 2006).

2.4 Ghana Police Force

The Ghana Police Service is the main law enforcement agency of Ghana. The Ghana police service is under the control of the Ghanaian Ministry of the Interior.

The Ghana police service was mandated by the 1992 Constitution article 200 and supported by the Police Service Act, 1970 (Act 350) to maintain internal security. The Ghana Police Service has twelve operational divisions, covering the ten regions of Ghana, with one unit assigned to safeguards the seaport and industrial activities at Tema, and another divisional unit assigned to the Railways, Ports and Harbours. An additional division, the Marine Police Unit, was created to safeguard the country's offshore oil and gas industry (Government of Ghana E-services, 2016).

The Special Weapon and Tactic (SWAT) is a law enforcement unit which uses specialised equipment and tactics in its operation. In Ghana, SWAT is purported to react quickly and decisively to avert crime especially when the criminal act is in progress. The Special Weapon and Tactics is therefore one of the units in the Ghana police service that is more exposed to the public.

2.5 Global Prevalence of Mental Disorders

Mental health is an important aspect of health and it can be affected by several factors such as social, cultural, political and environmental factors. The individual attributes than enable one to manage one's thoughts, behaviours, emotions, interactions with others, working conditions and living standards (WHO, 2013).

Globally, it is estimated that millions of people suffer from mental or behavioural disorders. The World Health Organization's Global Burden of Disease (GBD) also report that mental disorders contributed 13% to GBD and this is more rampant in low and middle income countries (WHA, 2012). Four of the six leading causes of years lived with disability are due to depression, schizophrenia, alcohol-use disorders and bipolar disorder. The number of people who suffer from mental health issues globally is alarming. Globally, about 41% of people suffer from depressive disorders at any given time, about 15% of people suffer from anxiety disorders every year, 11% of people suffer from drug-use disorder, 10% suffer from alcohol disorder and about 7% suffer from schizophrenia (Whiteford, 2010).

People with schizophrenia and depression have a 40% to 60% greater chance of dying prematurely than people in the generally population due to other conditions such as cancers, cardiovascular diseases, diabetes and so on that are normally not attended to or gotten treatment (WHO, 2013).

2.6 Prevalence of Mental Health Disorders in Africa

Most countries in Sub-Saharan Africa are characterized by low income levels, high prevalence of communicable diseases and malnutrition. The high mortalities are as a

result of infectious diseases and malnutrition. The issue of the mental health disorders normally receive little attention in most governments in the Africa continent.

The prevalence mental health disorders are higher in adults. It is estimated that posttraumatic stress disorder, anxiety, and depression ranges from 20% to 60% (Cortina, Sodha, Fazel, & Ramchandani, 2012).

It is estimated that 14% of the global prevalence of disease is attributed to neuropsychiatric disorders in which three quarters occur in developing countries (Lazarus & Freeman, 2009).

2.7 Prevalence of Mental Disorders in Ghana

The World Health Organization has estimated that about 650,000 out of 21.6 million people living in Ghana suffer from the severe form of mental disorders and an estimated 2,166,000 are suffering from moderate mental disorders (WHO, 2007). Using the WHO epidemiological estimation of mental health disorders in any given population and the Ghana Statistical Service's estimation that Ghana's population is about 27 million people, it is estimated that approximately 810, 000 of this estimated people suffer from severe mental disorders and another 2,700,000 people suffer from some form of mental disorders at any in time (GSS, 2014; Doku, Wusu-Takyi, & Awakame, 2012).

The mental health outpatient services treated fifty-seven thousand, four hundred and four (57, 404) users in Ghana. They diagnosed schizophrenia, schizotypal and delusional disorders (25%), mood disorders (10%), neurotic and stress related disorders (8%), mental and behavioural disorders as a result of psychoactive substance misuse (7%) and personality disorders (1%). The rest included epilepsy, organic mental disorders, and mental retardation (39%) which they termed as other

diagnoses category (Roberts, Asare, Mogan, Adjare & Osei, 2013). The public mental health hospitals recorded 7, 993 admissions in 2011, with 32% of the admissions being female. The diagnoses were as follows; schizophrenia, schizotypal and delusional (32%), mental and behavioural disorders due to psychoactive substance use (26%), mood disorders (19%), epilepsy, organic mental disorders, and mental retardation, termed as other diagnoses (12%), neurotic, stress related disorder (1%) and 10% had no diagnosis (Roberts, et al., 2013).

2.8 Police and Competency on Mental Disorders

The term cultural competency describes attitude, practice, policy and structure of an organization or institution. In order to assess the cross-cultural strengths and weaknesses of institutions that designed activities improve skills and capacity of the staff or officers, the Competency Model is used. Training activities are normally designed to improve the interaction with audience, clients and customers, developed the knowledge base of the workers to deliver better services. The training activities and other interventions help better the level of competence of professionals, agencies and systems (Mason, 1995).

The role of police officers is complex and officers are always called to execute a number of tasks aside detecting crime and arresting offenders. Police officers play a key role in instances where individuals are facing mental health crisis or challenges. The police are the emergency service providers when people with mental health disorders are in crisis. They have higher possibilities to be contacted by relatives if those with acute distress are putting themselves at immediate risk. These activities are very important to the day to day work of the police that they need to be trained on mental health issues. Majority of police officers have little training. The skills and

knowledge that they exhibit in this field are required through experience on duty or from their senior colleagues (Cummings et al., 2010).

Police officers normally find cases relating to mental health disorders difficult and challenging to manage. This is because they feel inadequately trained to detect and solve cases involving mental health issues. They however respond to calls by relatives when people with mental illness are in crisis (Borum, 1998).

2.9 Police and Competency on Mental Disorders in Canada

The Mental Health Commission of Canada (MHCC) is involved in a review of situations comprising interactions between police and persons with mental illness. The MHCC Police Project was a multidimensional study that comprised reviews of relevant police training and education strategies. It also developed guidelines to improve the interactions of police with people with mental health disorders. It was a study of experiences and perception of people with mental health disorders about their interactions with police agencies and police officers (Coleman et al., 2014). Across North America, there is an increased interaction between police and persons with mental health disorders, due to institutional changes. There are more people with mental disorders in communities due to a shift from mental health institutions to community based care (Adelman, 2003). Police officers are seen as first responders to the mental health system due to the numerous interactions they have with persons with mental illness. The police officers encounter with people with mental disorders make them the emotionally disturbed people (CAMH, 2013).

The police service and mental health workers play vital roles in providing assistance during mental health crisis. However there are differences in the work of these two groups (Forchuk, Jensen, Martin, Csiernik, & Atyeo, 2010). Forchuk, et al. (2010)

examined models of mental health services and the interaction the police have with mental health workers in each model. The number of contacts between police and people mental health crisis has increased in Canada and this is due to deinstitutionalization. The deinstitutionalization focused on improving the quality of life and it has contributed to the increase of contacts and subsequent detection of individuals with mental health disorders (Forchuk et al., 2010). The police officers are legally mandated to respond to calls at all time (CMH, 2009).

The daily programs are to improve the police interactions with people with mental disorders. These programs are said to be inconsistently implemented throughout Canada. This is due to the fact that police services differ by units. The common programs are enhancing basic training, operating the co-responder model and implementing Crisis Intervention Team (CIT) training for general patrol officers. These three popular programs reviewed by scholars researching the area (Sorfleet, 2012). The programs and services rendered to police officers relating to people with mental health disorders are not consistent all over British Columbia in Canada due to the power to allocate resources by the police detachment (Sorfleet, 2012).

2.10 Police and Competency on Mental Disorders in United States of America

The relocating of people with mental health conditions from the hospital into the community and the number of contacts between the police and people with mental disorder have increased. How police respond to crisis has important consequences for the people with mental disorders, police officers and the community (Watson, Corrigan, & Ottati, 2004). Watson, et al, (2004) has indicated that police officers are less likely to take action based on calls from victims and witnesses of people with

mental disorders. There were no differences found in response to suspects with or without mental disorders (Watson et al., 2004).

The police officers interact with more people suffering from mental disorders than any other occupational group outside the mental health area. They are normally the first to come into contact with people with mental disorders and they determine whether persons with mental disorders should be referred to the mental health institutions for treatment or not. However the police officers' training in mental health is not adequate. In some places, they have developed intervention models that include training of police officers in mental health (Vermette, Pinals, & Appelbaum, 2005).

Police officers often encounter individuals with mental disorders though they do not receive special training aside what they received during their initial academic training. It is revealed that law enforcement agencies in California estimated the average number of mental health training hours in the academy to be 6.3, only 83 of 158 agencies provided mental health training after the academy. Seven percent of police departments said they have trained their police officers specifically on suicide prevention (Vermette et al., 2005).

Police departments across the United States have recognised the challenge in responding to calls involving people with mental disorders. They have enhanced training on mental health issues. They are implementing strategies to improve safety and manage the calls involving people with mental health crisis. Currently they are using CIT model, with which over 1000 police departments are implementing in United States (Watson et al., 2014).

In United States of America, CIT Training is a training program developed in a number of U.S states to help police officers react appropriately to situations involving

mental illness or disability. The implementation of CIT is supposed to have wide ranging effects. It should enhance officers' skills and knowledge in their encounter with people who have mental illness and their families, reduce the need for force by officers, reduce the incidence of violence in these encounters by people with mental disorders, reduce the frequency of arrest, reduce the incidence of injury to all parties involved, and increase access to crisis and other psychiatric treatment (Watson, Morabito, & Ottati, 2009). CIT-trained officers seemingly appreciate timely programs in the treatment system may avert future crises (Teller, Munetz, Gil, & Ritter, 2006).

2.11 Police and Competency on Mental Disorders in United Kingdom (UK)

The concept of mental health literacy in the UK is the knowledge and beliefs about mental disorders which help the officers' recognition, management or prevention. It includes the ability to recognise specific disorders; knowing how to seek mental health information; knowledge of risk factors, availability of professional help and appropriate help-seeking for police officers (Brooker & Sirdifield, 2009).

In the UK, the safe place for people with mental disorders includes the psychiatric units, police stations, and hospital accident and emergency departments. However police custody is not a suitable place for these people due to many reasons. Some of the reasons include; 1. It has the effect of criminalizing people for what is fundamentally a health need. 2. The environment may worsen their mental health state, and in the most disastrous cases can result to deaths in custody (Bradley, 2009).

The increasing police interactions with people with any form of mental disorders. However a good number of the officers are receiving partial and inadequate training to equip them for the situations they face on daily basis. As a result, people with mental disorders normally feel they are not receiving the right treatment from the

police (Cummings et al., 2010). A scheme in Wales focuses on developing police officers awareness and understanding of mental disorders and it brings the officers directly into psychiatric wards (ACPO, 2010).

Another example where the police and health providers are working together is the Diamond District Initiative. In this initiative, the local authorities in some London boroughs and Metropolitan Police are jointly commissioning community police teams with attached mental health social support workers (Bradley, 2009).

Dyfed Powys Police and Hywel Dda Health Board collaboratively train police officers in mental health awareness. When a police officer trainee finish a day's Mental Health First Aid (MHFA) training in an acute psychiatric ward, he or she is placed with local mental health facilities. This gives police officers the opportunity to interact with mental health clients and to get better understanding of their experiences and needs (ACPO, 2013).

The training for police officers on mental health awareness is not adequate. This make it difficult for officers to differentiate individuals with mental disorders from the high number of detainees that are reported to be drunk or commonly use of drug at the police station (Bradley, 2009).

There are number of training and educational programs or model established for police officers on mental health. These models are developed for police officers because, the nature of their work increasingly brings them into contact with people with mental disorders. Police officers are a vital group for a mental health educational intervention. The police need to have much knowledge on mental health to support their own emotions in a career involving high stress levels and to effectively and efficiently manage people with members of mental health problems (Pinfold et al., 2003).

It was proposed that police officers should be trained in mental health related issues and people in mental crisis so they could provide better services for the general public. Police officers are trained on police- based specialized police response model where they service as the first-line police response to mental health crisis in the community (Borum, 2000). Whenever problems are encountered during training, there should be feedback from police officers can have possible impact. In relations to the best approach to training police officers, techniques used in adult learning situations may also be appropriate. In medical training, it is now well documented that the use of role play with fake patients is preferable over classroom learning (Silverstone, Krameddine, Demarco, & Hassel, 2013).

A study by Independent Police Complaints Commission (IPCC) in England and Wales revealed that, mental health contribute significantly to deaths among people in police custody. Shootings the vulnerable people by police was also identified by the study as poor interaction between police and people with mental disorders. The study recommended sufficient training for police officers to enable them recognize symptoms and signs of mental disorders and appreciate their powers under the mental Health Act. Later other national organizations such as the Association of Chief Police Officers (ACPO) and the National Police Improvement Agency (NPIA) responded (Coleman & Cotton, 2010).

2.12 Police and Competency on Mental Disorders in South Africa

In South Africa, there is a good collaboration between the mental health care services and other organizations or agencies such as the South African Police Service (SAPS), Department of Justice, Department of Correctional Services, and Department of Education to promote mental health among the people (Uys & Middleton, 2012). The South African Federation of Mental Health design programs to equip the police with skills on how to manage people with mental health disorders when asked for assistance (Kakuma et al., 2010).

It is estimated that about 1-20% of police officers have undergone training on mental health in the past years in Gauteng and Free State. Twenty-one to fifty percent of the police officers have participated in such educational activities in Mpumalanga. There are no reports of training activities for police officers in the other provinces (WHO, 2007).

2.13 Police and Competency on Mental Disorders in Nigeria

The police are normally the first to be called upon when there are crises involving people with mental health illness and this constitutes an important component in the pathways to care (Omoaregba, James, Igbinoanahia, & Akhiwu, 2015).

Nigeria has seven mental health facilities with population of about 200 million people (Alex et al., 2013). It is estimated that about twenty percent of police, judges, and lawyers have participated in educational activities on mental health in the last five years (WHO, 2006).

Omoaregba, et al, (2015), found out that the behaviour of police officers towards people with mental disorders was poor. The police often coming into contact with people with acute mental disorders (Omoaregba et al., 2015).

2.14 Police Competency on Mental Disorders in Ghana

Ghana has consumer associations for people with mental disorders but it has not got associations for families. In Ghana there is no coordinating body to supervise public education and awareness campaigns on mental health and mental disorders. In the last five years, Government agencies, NGOs, professional associations and International agencies have promoted public education and awareness campaigns (WHO, 2012).

The Ghana police should be equipped with batons, helmets and protective shields and police personnel should be given special training in all aspect of riot/ crowd control. Proper operational orders should be drawn to specify the nature of the operation, the method of operation and the time of commencement of the operation. Tear gases must not be fired in an enclosed arena as a means of crowd control or dispersal no matter the conditions. Although training and retraining have been stressed, sandwich and refresher courses should be provided for all officers to improve professional skills to enable them handle socio-economic, political and technological challenges (Aning, 2006).

In terms of educational activities on mental health and the criminal justice system, less than 2% of prisoners have contact with a mental health professional. There is no educational activities on mental health issues for police, lawyers, and judges (WHO, 2012).

Journal articles retrieved through conducting a search in data bases; Ghana Police Service website, the University of Ghana's subscription journal databases (PubMed, Hinari etc.), Google scholar, etc. revealed there is limited literature on the study about Ghana. Search phrases included police and mental health, police and mental disorders, mental health disorders and law enforcement, police and mental health awareness, police training and mental health issues, etc. More than 250 articles were identified in

the search. More than ninety articles were reviewed in this study, only four of the articles reviewed focused on police and mental health awareness in the Sub-Saharan Africa. None of these articles focused on police and mental health issues in Ghana. However, Ibrahim et al. (2015) looked at mental distress among prison inmates in Northern Ghana. The study found that majority of inmates suffered from at least one form of mental disorders. These inmates would have had some interaction with police before they were incarcerated in the prison. This shows the need for police officers to have competency on mental disorders. This is the only study found to be related to this study.



CHAPTER THREE

METHODS

3.1 Introduction

This chapter presents the research method used for the study. It includes the type of study design, study area, study population, variables, sample size, technique and method, data collection method and tools and ethical consideration.

3.2 Study Area

The SWAT unit is one of the unit at the national headquarters of the Ghana police service, located in Cantonments, Accra.

The population of Accra Metropolis has total population of about 1.7 million representing 42% of the region's total population and about 48.1% of the total population are males and 51.9% are females. The Accra Metropolis is entirely urban and stretches along the Ghanaian Atlantic coast and extends north into Ghana's interior, see Figure 2 below. Accra serves as the Greater Accra region's economic and administrative hub. It is also a centre with a wide range of nightclubs, restaurants, and hotels. The central business district of Accra contains the city's main banks and department stores, and an area known as the Ministries, where Ghana's government administration is concentrated. Economic activities in Accra include the financial and agricultural sectors, Atlantic fishing, and the manufacture of processed food, lumber, plywood, textiles, clothing, and chemicals



Figure 2: Map of Accra Metropolis

3.3 Study Design

This study was an exploratory cross-sectional study of police officers in SWAT unit at the National Police Headquarters, Accra in the Greater Accra Region. Data on mental health awareness, knowledge of symptoms of mental disorders and knowledge of risk factors associated handling people with mental disorders were collected from the study subjects. Background information such as age, sex, marital status, and level of education, level of training, rank and religion was collected. Data on number of years served were also obtained.

3.4 Study population

The study's general population was SWAT police officers in Accra Metropolis. The Special Weapons and Tactics (SWAT) is a specialized operational unit located at the national headquarters of the Ghana Police Service. The unit has police population of 349.

i. Inclusion

The Special Weapons and Tactics (SWAT) unit officers who were willing and able to participate in the study. The SWAT unit has a higher chance of dealing with people with mental disorders. For instance the SWAT mainly combats crime.

ii. Exclusion Criteria

All non-SWAT police officers were excluded from the study.

3.5 Variables

3.5.1 Dependent Variable

The level of competency and awareness on mental disorders among SAWT unit officers. With reference to the definition by Bhui, et al. (2007), competency is operationally defined in this study as the ability of police officers to be aware and positively identify mental disorders and symptoms of mental disorders and to be able to manage people with mental disorders. Awareness and knowledge are thus used interchangeably in this study.

3.5.2 Independent Variable

Number of years in service

3.5.3 Controlling variables

Level of education; Religion; Age; Sex; Marital status

3.6 Sampling

3.6.1 Sample Size Determination

The minimum sample size of 384 was calculated using Cochran formula and this sample is more than the total population of the SWAT police officers.

Since the required sample was greater than 5% of the population of police officers in the SWAT unit and the sample would be chosen without replacement, the finite population correction factor is used.

Using the formula for sample size correction factor, $N = n_0 / 1 + (n_0 - 1) / n$

n = minimum required sample size

N_0 = sample size (that is to be corrected), 384

N = total population of police officers in the unit, 349

$$n = 384 / 1 + (384 - 1) / 349 = 183$$

Therefore a minimum of 183 police officers was required for the study. A 10% is added for non-response and loss of questionnaire making a total number of 200 police officers.

3.6.3 Sampling Method/Procedure

A systematic simple sampling method was used to select the respondents for the study.

The names of officers were listed in alphabetical order. The first officer was chosen by a random sampling. Using the list as a sampling frame, an appropriate sampling interval (k) was calculated based on the sample size of the study. Therefore, sampling interval (k) = $349/200 = 1.745 \approx 2.0$. Simple random sampling was used to select a police officer at the starting point. Then selection was done on every second (2nd) police officer until the entire sample size was exhausted. Whenever a selected officer was not available or declined to participate in the study, the next officer that follows directly in the list was chosen without altering the sample interval.

3.7 Data Collection Tools and Techniques

A face- to- face interview using a structured questionnaire was used to collect data from the respondents. The questionnaires were self-administered among those who opted to answer questions in their own hand writing. However they did so in the presence of the principal investigator to prevent them referring to other sources for answers.

3.8 Data Quality Control

The following measures were put in place to ensure quality of data;

Research assistants were trained in data collection and analysis to ensure uniformity. However face-face interviews were mainly done by the principal investigator. The research assistants assisted respondents who opted to answer questionnaire in their own writing. A situation where an officer wishes to discontinue answering the

questionnaire, that officer was replaced and the corresponding questionnaire was discarded. Questionnaires were critically examined at the end of each day. Challenges in the questionnaire and the whole research process were identified in the pre-test. These challenges and issues encountered during pre-test were addressed and fine-tuned.

3.9 Pre-test or pilot study

The questionnaire was pre-tested on a sample of 10 police officers at Legon Police station in Accra. This was to ensure the quality of the questionnaire and also ensure that, the design of the study and the methodology was likely to produce the information required. The questions were reviewed to suit the design of the research and understanding of the respondents.

3.10 Data management and Analysis

The principal investigator collected on a daily basis, and checked the data for completeness and corrected errors that arose during data collection. Data was entered in Excel sheets and then exported to STATA version 13.0 software for analysis. Data was first analysed descriptively by running for frequencies and proportions. Chi-Squared test was done to determine significance differences awareness and competency of mental disorders and independent variables and presented as contingency tables with p values. Variables with P-value <0.05 at bivariate level were considered statistically significant. Multivariate analysis (multiple logistic regression) was used to establish the true strength of the association between the various variables. The results were presented in two by two tables which displayed the frequencies, percentages, unadjusted (crude) and adjusted odds ratios (ORs) and 95% confidence intervals (CIs) and p-values. The type of mental disorder with the highest

level of awareness and competency and the type of mental disorder with lowest level of awareness were used to run bivariate and multivariate analysis.

The defined outcome of interest was awareness and defined as Police Officers being knowledgeable of mental disorders or psychological distress, including knowledge of symptoms of mental disorders. Awareness and knowledge are used interchangeably in this study.

Respondents answer ‘yes’ or ‘no’ to question “have you ever heard” of the named type of mental disorder. The knowledge of symptoms of mental disorders and risk factors associated with handling people with mental disorders, respondents were asked to mention a minimum of two symptoms and five risk factors respectively. The results were presented in that manner.

3.11 Ethical Considerations

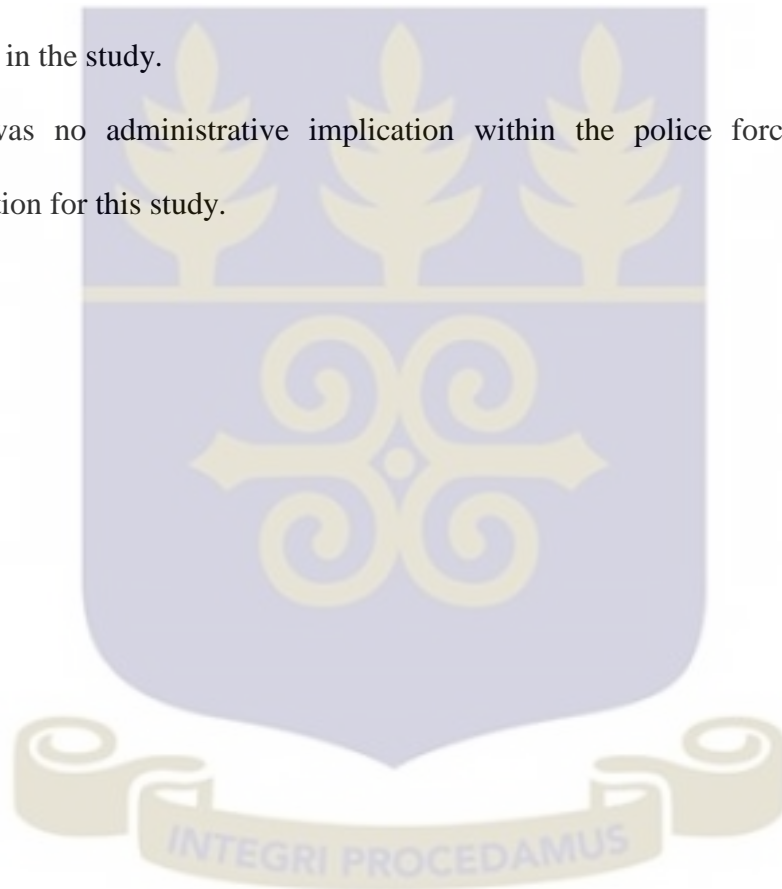
In line with national research standards, Ethical Clearance was sought from the Ethical Review Committee of the Ghana Health Service, see appendix III. Additional approval was obtained from Ghana Police Service administration headquarters, see appendix IV. Letters of approval was sought from the Ghana Health Service Ethical Review Board and the School of Public Health. The objectives, benefits and details of the study were clearly explained to the police officers. There was no risk to the study as officers rather gained some knowledge about mental disorders. The officers were allowed to give consent by signing letters of consent before they are recruited. No officer was forced or coerced to take part in the study. Participants were informed that their participation in the study was voluntary and there was no penalty for refusal of participation.

The police officers were also told about their rights to withdraw from the study

without any coercion as the study is purely voluntary. Officers' identities remained anonymous to ensure confidentiality. Identities were not disclosed at any point of the study. Data collected were password protected, stored on a computer and backed on an external hard drive. Hardcopies were locked up in cabinets with limited access to only the principal investigator and supervisor of the study. There was no form of compensation for participation and the study was solely voluntary.

Apart from its academic and public health importance, there are no other personal interests in the study.

There was no administrative implication within the police force for providing information for this study.



CHAPTER FOUR

RESULTS

4.0 Introduction

This chapter presents the key findings, analysis and interpretation of the data collected in relation to level of competency on mental disorders among SWAT unit of the police officers in the Accra metropolis. In line with the definition by Bhui, et al. (2007), competency is operationally defined as the ability of police officers to positively identify mental disorders and symptoms of mental disorders and to be able to manage people with mental disorders. The chapter provides an overview of the background characteristic of the study participants, their awareness and competency of mental disorders as well as knowledge of risk factors associated with handling of people with mental disorders. Association and the strength of association are established by using the type of mental disorders with highest level awareness and competency and the type with lowest level of awareness by officers.

4.1 Participant Characteristics

A total of 200 Police Officers participated in the study. The participants comprised 148 men and 52 women.

The results also showed that majority (86.5%) of Police Officers were aware and competent of public mental health facilities in Ghana. However, 68% of officers have never had any interaction with these mental health facilities at all. Only 2.5% of the officers had ever had some interaction with the public mental health facilities in Ghana.

Of the age structure of the study participants: 31.5% were between the ages of 18 to 29; 63.5% between ages 30 to 49; and 5% were in the age group of 50 to 60.

The educational level of the study participants was as follows: Middle School/Junior High School (JHS) which was given by 9%, Senior High School (SHS) presented 58.5% and tertiary formed 31.5% while those with other (A-level) formal education constituted 1%.

Findings also suggested that, majority of the officers were Christians (83.5%) and the least religious group were the traditionalist and spiritualist (2.5%). The marital status of officers indicated that the married formed the majority (63%), singles (35%), divorced/separated (1.5%) and widowed (0.5%), respectively.

The characteristics of officers in active service are also presented in Table 1. Majority of officers (62.5%) had one year to ten years' service experience and 32.5% officers served from 11 to 20 years in the Ghana Police Service. Only 5% of them had gotten more than twenty (20) years' service experience. As many as 167 officers (83.5%) had the basic police training, 9.5% had undergone both basic training and Junior Command course, 5.5% officers said they had training on Junior Command course and only 1.5% of the officers had cadet training. Majority of officers (33%) were constable in rank, 31.5% were corporals, 15.5% were sergeants, 14.5% were lance corporals while inspector and chief inspector rank represented by 2% and 3.5% respectively.

Table 1: Background characteristics of SWAT police officers

Variable (N=200)	Category	Frequency(n)	Percentage (%)
Age	18-29	63	31.5
	30-49	127	63.5
	50-60	10	5.0
Sex	Male	148	74.0
	Female	52	26.0
Education level	Middle/JHS	18	9.0
	Secondary/SHS	117	58.5
	Tertiary	63	31.5
	Others	2	1.0
Religion	Christianity	167	83.5
	Islamic	27	13.5
	African Tradition religion	5	2.5
	others(Jewish)	1	0.5
	Marital Status	Marriage	126
Single	70	35.0	
Divorced/Separated	3	1.5	
Widowed	1	0.5	
Service experience (years)	1-10	125	62.5
	11-20	65	32.5
	Above 20	10	5.0
Level of training	Basic training	167	83.5
	Under cadet	3	1.5
	Junior command	11	5.5
	Basic & Junior command course	19	9.5
	Rank	Constable	66
Lance Corporal	29	14.5	
Corporal	63	31.5	
Sergeant	31	15.5	
Inspector	4	2.0	
Chief inspector	7	3.5	

4.2 Psychiatric training of Police Officers

Figure 3 shows the officers' training on medical and psychiatric courses. Majority (95.5%) of officers never had medical training. Also almost all of the police officers (99%) never had any psychiatric training.

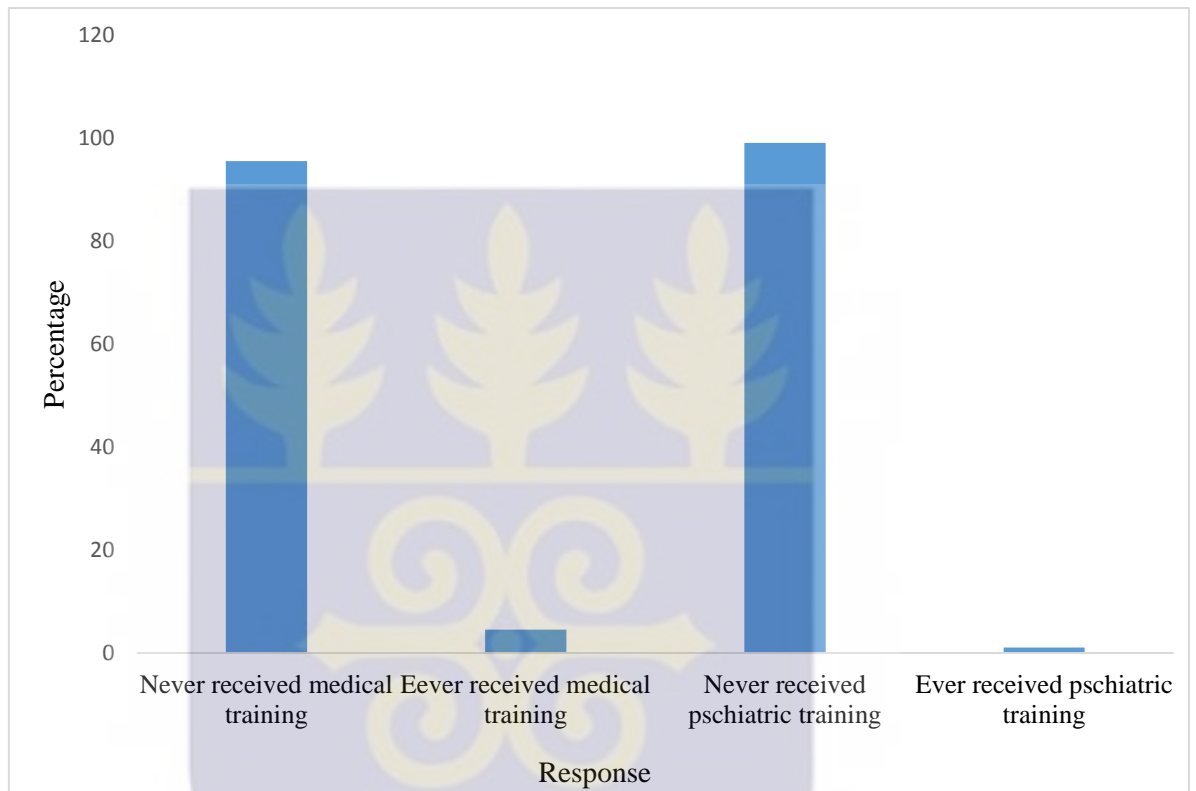


Figure 3: Psychiatric Training of Officers

4.3 Awareness and Competency of Mental Health Facilities

Among the 173 police officers who said they were aware of the mental health facilities in Ghana, 22% were able to mention all the three main public mental health facilities in Ghana, 22% were able to mention all the three main public mental health hospitals in Ghana, (namely Pantang, Accra psychiatric and Ankafu mental health hospitals). About 43% were able to name two of three main public mental health hospitals, and a quarter (25%) mentioned only one of the facilities. Less than 10% were unable to name any of the mental health facilities in Ghana though they said they were aware and competent of their existence.

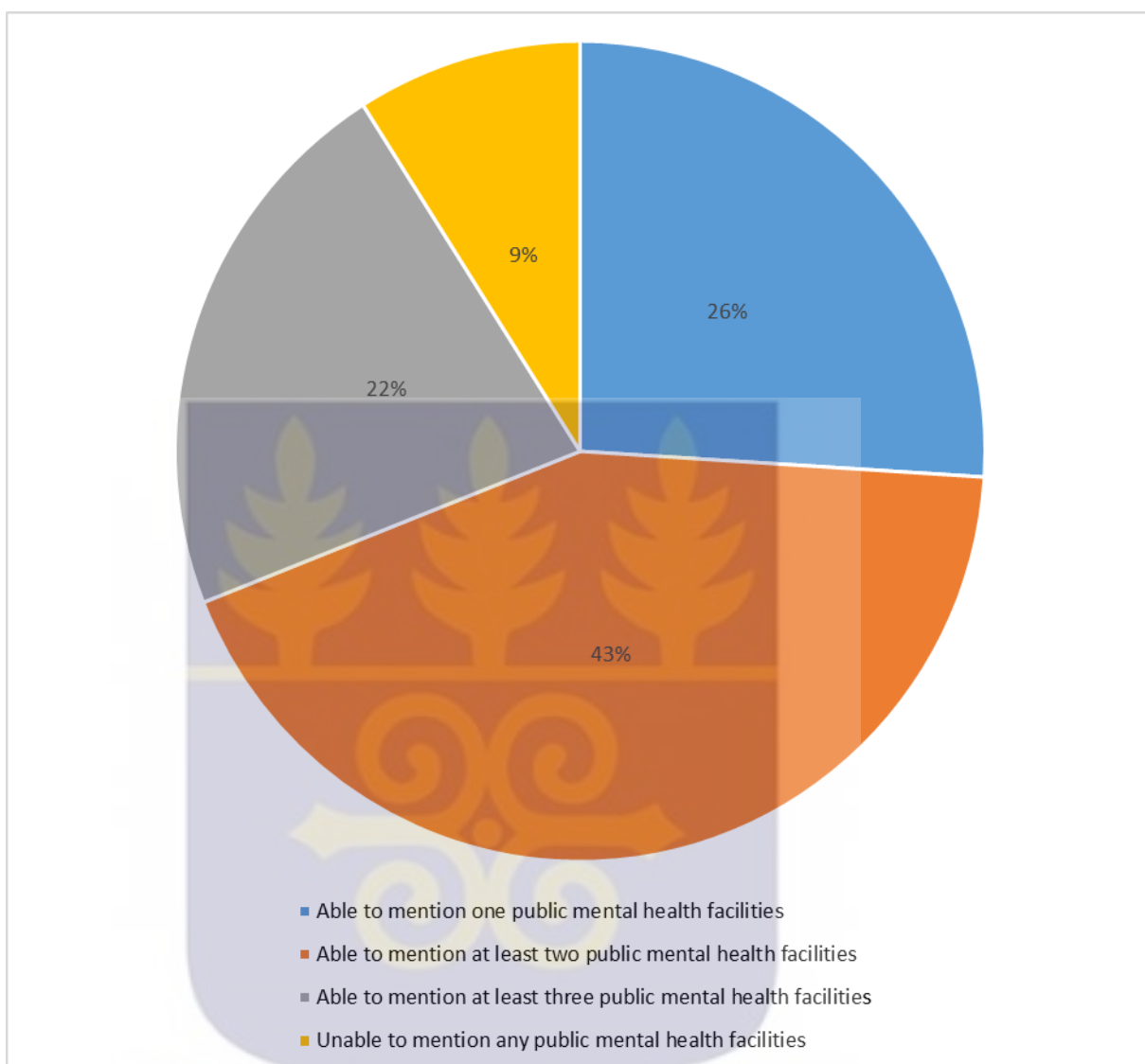


Figure 4: Awareness and Competency of mental health facilities

4.4 Awareness and competency of Mental Disorders

Figure 5 presents the officers' awareness and competency of the mental disorders. Majority (80%) of the officers said they have ever heard of drug/substance abuse and 79 % have ever heard of self-harm/suicide. Nearly 76% of the SWAT officers and 64% of them said they have ever heard of epilepsy and depression respectively. Additionally, about 36.5% reported that they have ever heard of personality disorders, while 22% of them have ever heard of mood disorders. Only 9.5% of the officers

said they have ever heard of schizophrenia and less than 10% of the SWAT police officers have ever heard of all the types of mental disorders mentioned in this study.

Fewer than 11% officers suggested that they are aware of top ten mental disorders commonly diagnosed in Ghana.

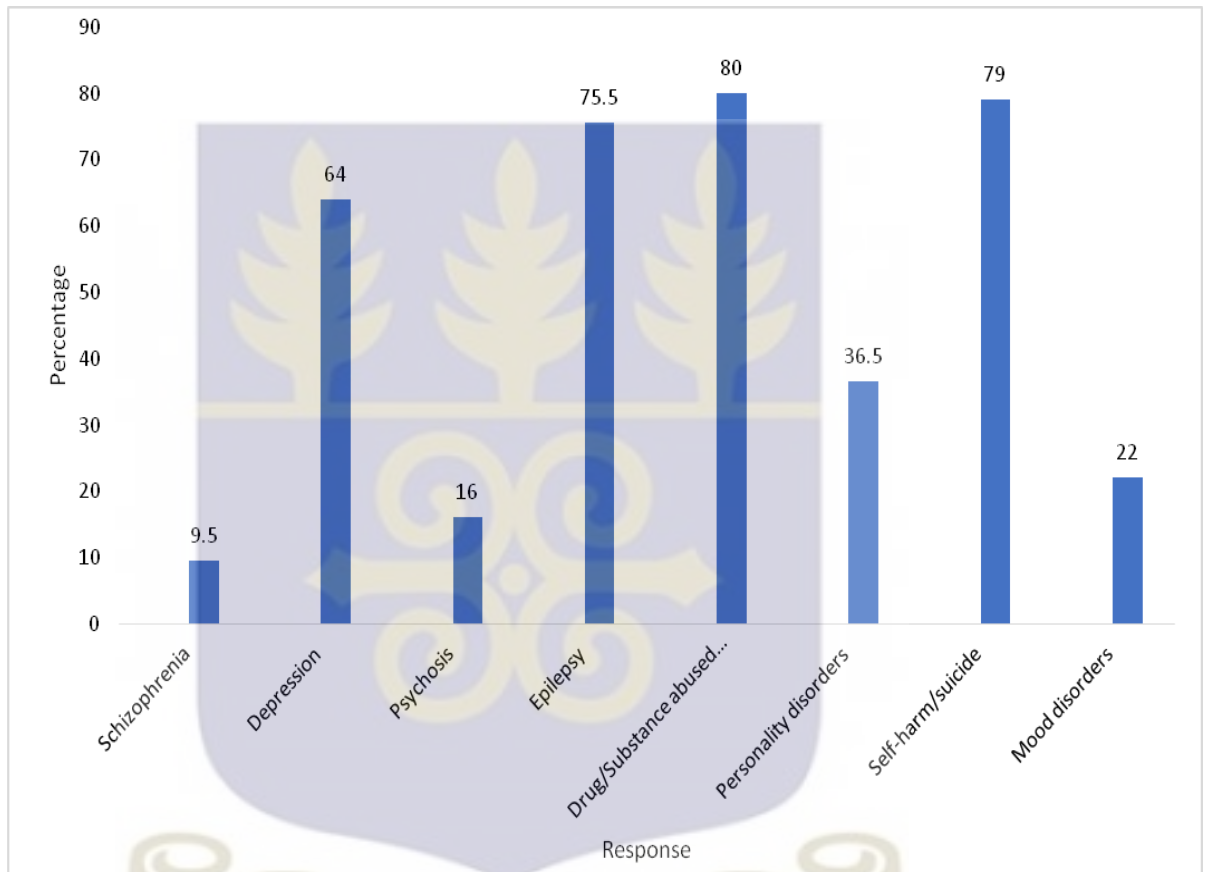


Figure 5: Awareness and Competency of mental disorders

4.5 Knowledge of symptoms of Mental Disorders

Table 2 presents the officers' knowledge of symptoms of mental disorders. Officers were asked to mention at the minimum any two symptom of mental disorders provided the respondent has ever heard of that particular disorder or condition.

Majority (97%) of the officers were unable to mention any symptom of schizophrenia, while 1% were able to mention the minimum of two symptoms of schizophrenia.

Of the officers, 3% were able to mention two symptoms correctly, while 91.5% could not mention any symptom of delusion.

Among officers who have ever heard of depression, 7.5% could mention two symptoms of depression correctly. Majority (71.5%) of the officers could not mention any symptom of depression.

Epilepsy is one of mental disorders that majority (75.5%) of officers said they have ever heard of it, only 36% of the officers were able describe one symptom of epilepsy correctly. 60.5% had no idea about the symptoms of epilepsy.

Less than 3% of the officers were able to mention any two symptoms of drug/substance, while as many as 69% of them were unable to mention any symptom of drug/substance though majority (80%) of the officers said they have ever heard of drug/substance abuse.

Majority (79%) of the officers have ever heard of self-harm/suicide, however only 1% of them were able mention two symptoms of self-harm or suicide. About 89% of the officers were unable to mention any symptom of self-harm/suicide.

Personality disorder is one of the mental disorders that majority (90.5%) of the officers were unable to mention any symptom though officers said they have ever heard of personality disorder.

About 95.6 % of the officers were unable to mention any symptom of psychosis while less than 2% of the officers were able mention two symptoms of psychosis.

Of officers who said they have ever heard of mood disorder, only 5% and 8% of them mentioned any two symptoms and one symptom of mood disorders respectively.

Majority (87.5%) were unable to mention any symptom of mood disorder.

Table 2: Knowledge of symptoms of mental disorders

Variable	Response to knowledge of symptoms of mental disorders		
	Unable to mention any symptom n (%)	Able to mention any one symptom n (%)	Able to mention any two symptoms n (%)
Schizophrenia	194(97.0)	4(2.0)	2(1.0)
Delusion	183(91.5)	11(5.5)	6(3.0)
Depression	143(71.5)	42(21.0)	15(7.5)
Psychosis	191(95.5)	6(3.0)	3(1.5)
Epilepsy	121(60.5)	72(36.0)	7(3.5)
Drug/substance abuse	138(69.0)	57(28.5)	5(2.5)
Personality disorder	181(90.5)	16(8.0)	3(1.5)
Self-harm/suicide	177(88.5)	21(10.5)	2(1.0)
Mood disorder	175(87.5)	16(8.0)	9(4.5)

4.6 Knowledge of Risk Factors Associated with People with Mental Disorders

Of all the officers in this study who were asked to mention risk factors associated with handling of people with mental disorders, 14.5% mentioned one risk factor, 30% mentioned two risk factors, 17.5% mentioned three risk factors, 5.5% mentioned four risk factors, and less than 1% of the officers were able to mention five risk factors.

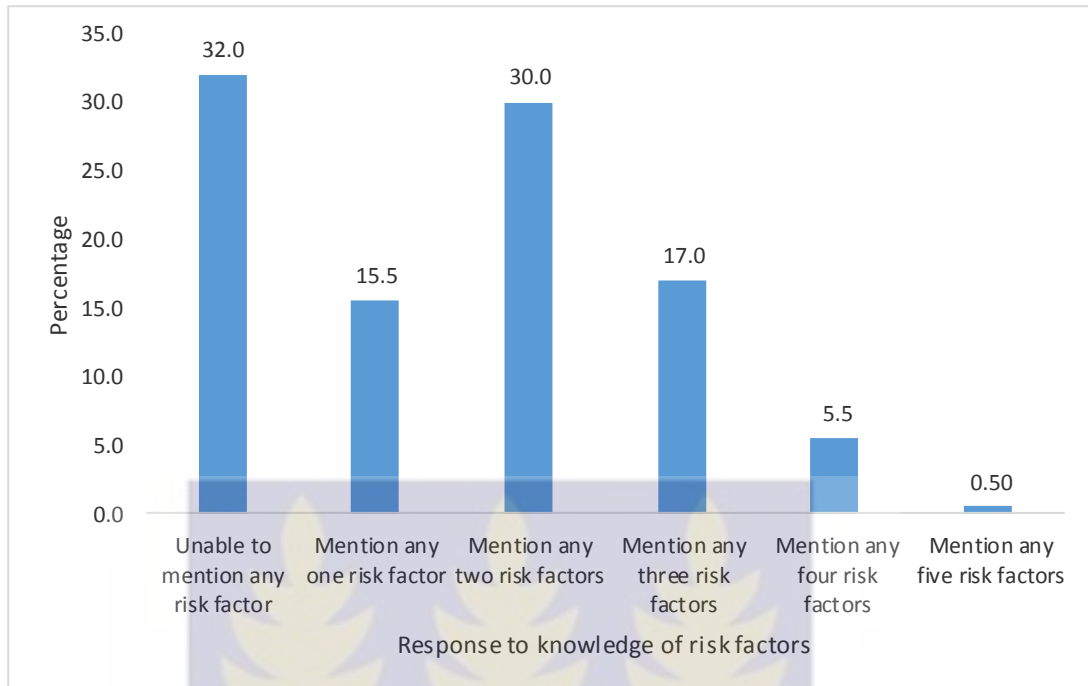


Figure 6: Knowledge on Risk Factors associated with handling people with mental disorders

4.7 Background Characteristics of Awareness and Competency of Mental Disorders

Table 3 presents a bivariate analysis of background characteristics of officers and their level of awareness and competency on mental disorders. This study found that there is a strong evidence of an association between level of education attained by officers and awareness and competency of drug/substance abuse ($\chi^2=15.69$, $p = 0.001$); marital status of the officers was significantly associated with awareness and competency of Drug/Substance Abuse ($\chi^2 =10.86$, $p=0.012$). There was no association between all the background characteristics (age, sex, education, rank, etc.) and level of awareness of schizophrenia as presented in Table 4.

Table 3: Association between background characteristics and awareness/Competency of substance use

Variable	<u>Ever heard of drug/substance abuse</u>		df	χ^2	P-value
	Category	Yes-n(%)			
Sex			1	3.44	0.064
	Male	123(83.1)	25(16.9)		
	Female	37(71.2)	15(28.9)		
Age			2	1.10	0.576
	18-29	49(77.8)	14(22.2)		
	30-49	104(81.9)	23(18.1)		
	50-60	7(70.0)	3(30.0)		
Educational level			3	15.69	0.001*
	middle/JSS	10(55.6)	8(44.4)		
	secondary/SSS	89(76.1)	28(23.9)		
	Tertiary	59(93.6)	4(6.4)		
	Others	2(100.0)	0(0.0)		
Marital status			3	10.86	0.012*
	Married	106(85.5)	18(14.5)		
	Single	51(70.8)	21(29.2)		
	Divorce/separated	3(100.0)	0(0.0)		
	Widowed	0(0.0)	1(100.0)		
Religion			3	0.94	0.816
	Christianity	134(80.7)	32(19.3)		
	Islamic	20(74.1)	7(25.9)		
	African TR	5(83.3)	1(16.7)		
	Others	1(100.0)	0(0.0)		
Service experience (Years)			2	4.62	0.099
	(1-10)	95(76.00)	30(24.00)		
	(11-20)	55(84.62)	10(15.38)		
	(Above 20)	10(100)	0(0.0)		
Level of Training			3	3.02	0.389
	Basic training	131(78.4)	36(21.6)		
	Under cadet	2(66.7)	1(33.3)		
	Junior com. Course	10(83.3)	2(16.7)		
	Basic & Junior com. course	17(94.4)	1(5.6)		
Rank			5	4.12	0.533
	Constable	49(74.2)	17(25.8)		
	Lance Corporal	24(82.8)	5(17.2)		
	Corporal	53(84.1)	10(15.9)		
	Sergeant	24(77.4)	7(22.6)		
	Inspector	3(75.0)	1(25.0)		
	Chief inspector	7(100)	0(0.0)		

P-value < 0.05* statistical significance

Table 4: Association between background characteristics and awareness /Competency of schizophrenia

Variable	<u>Ever heard of schizophrenia</u>		df	χ^2	P-value
	Category	Yes- n(%)			
Sex			1	0.27	0.605
	Male	15(10.1)	123(89.9)		
	Female	4(7.7)	48(92.3)		
Age			2	3.12	0.210
	18-29	9(14.3)	54(85.7)		
	30-49	10(7.9)	117(92.1)		
	50-60		10(100.0)		
Educational level			3	2.37	0.500
	Middle/JSS	0(0.0)	18(100)		
	SSS	12(10.3)	105(89.7)		
	Tertiary	7(11.1)	57(88.9)		
	Others	0(0.0)	1(100.0)		
Marital status			3	2.77	0.428
	Married	13(10.5)	111(89.5)		
	Single	5(6.9)	67(93.1)		
	Divorce/separated	1(33.3)	2(66.7)		
	Widowed	0(0.0)	1(100.0)		
Religion			3	0.88	0.830
	Christianity	15(9.0)	152(91.0)		
	Islamic	3(11.1)	24(89.9)		
	African TR	1(16.7)	5(83.3)		
	Others	0(0.0)	1(100)		
Service experience (Years)			2	0.20	0.907
	(1-10)	11(8.80)	114(91.20)		
	(11-20)	7(10.77)	58(89.23)		
	(Above 20)	1(10.00)	9(90.00)		
Level of Training			3	2.54	0.468
	Basic training	18(10.78)	149(89.22)		
	Under cadet		3(100.00)		
	Junior com. course	1(8.33)	11(91.67)		
	Basic & Junior com. Course		18(100.00)		
Rank			5	3.47	0.627
	Constable	8(12.12)	58(87.88)		
	Lance Corporal	1(3.45)	28(96.55)		
	Corporal	4(6.35)	59(93.65)		
	Sergeant	5(16.13)	26(83.87)		
	Inspector	1(25.00)	3(75.00)		
	Chief inspector		7(100.00)		

P-value < 0.05* statistical significance

Table 5 presents odds ratios and 95% confidence intervals (and p-values) of independent variables and awareness and competency of drug/substance abuse using multiple logistic regression.

Tertiary education is a strong predictor of awareness and competency of drug/substance abuse because the odds of an officer with tertiary education is about 12 times as great as the odds of an officer with Middle/JHS education [OR = 11.8; 95% CI = 2.98 – 46.66]. After controlling for other independent variables (age, sex, education, rank, etc.), the odds of awareness and competency of drug/substance abuse was about 64 as great when officers have had tertiary education as compared to if they had had a middle/JHS [OR = 63.87; 95% CI = 8.08 – 504.85]. After adjusting for other independent variables (age, sex, education, rank, etc.), the odds of awareness and competency of drug/substance is 6.4 times as great if officers had secondary/SHS education as compared to if they had middle/JHS education [OR = 6.39 95% CI = 1.47 – 27.74]. Odds of officers who are single are 2.42 times more likely to be aware and competent of drug/substance abuse than if they were married [OR = 2.54; 95% CI = 1.19 – 4.95]. Odds after controlling for independent variables (age, sex, education, rank, etc.), officers who were single are 3 times more likely to be aware and competent of drug/substance abuse than those who were married [OR = 3.02; (95% CI = 1.08– 8.48].

The odds of a female being aware and competent of drug/substance abuse was reduced by about 70% after adjustment [OR = 0.32; 95% CI = 0.12 – 0.87]. Also a practicing African traditionalist was significantly associated awareness and competency of drug/substance abuse. Officers who were African Traditionalists, were about 0.2 times less likely to have ever heard of drug/substance abuse compared to those who were Christians after adjustment [OR = 0.16; 95% CI = 0.00 – 0.35]. The

other independent variables such as age, service experience, level of training and rank were not significantly associated with awareness and competency of drug/substance abuse as presented in Table 5.



Table 5: Multiple logistic regression analysis of substance use by independent variables

Variable	Ever heard of drug/substance abuse	
	Unadjusted OR(95%CI)	Adjusted OR(95%CI)
Sex		
Male	1	1
Female	0.50(0.24 –1.05)	0.32(0.12 – 0.87)*
Age		
18-29	1	
30-49	1.29(0.61–2.72)	0.40(0.13 –1.25)
50-60	0.67(0.15 –2.92)	0.53(0.02 –13.33)
Educational level		
Middle/JSS	1	1
Secondary/SSS	2.54(0.91–7.07)	6.39(1.47 –27.74)*
Tertiary	11.8(2.98 –46.66)***	63.87(8.08 –504.85)***
Others	–	–
Marital status		
Married	1	1
Single	2.42(1.19 –4.95)*	3.02(1.08 –8.48)*
Divorce/separated	–	–
Widowed	–	–
Religion		
Christianity	1	1
Islamic	0.65(0.25 –1.68)	0.96(0.26 –3.50)
African TR	0.34(0.055 –2.13)	0.16(0.00 – 0.35)***
Others	–	–
Service experience(years)		
(1-10)	1	1
(11-20)	0.58(0.26 –1.27)	2.35(0.43 –12.81)
(Above 20)	–	–
Level of training		
Basic training	1	1
Under cadet	0.55(0.05 –6.23)	0.07(0.01–5.02)
Junior command course	1.37(0.29 –6.55)	1.21(0.13 –11.25)
Basic training& Junior command course	4.67(0.60 –36.30)	1.89(0.15 –24.46)
Rank		
Constable	1	1
Lance Corporal	1.67(0.55 –5.05)	1.87(0.52 –6.69)
Corporal	1.84(0.77 –4.40)	1.44(0.36 –5.80)
Sergeant	1.19(0.43 –3.25)	0.21(0.24 –1.88)
Inspector	1.04(0.10 –10.69)	–
Chief inspector		

OR=Odds ratio, CI= confidence interval, P-value < 0.05* P-value < 0.005** P-value < 0.0005***

CHAPTER FIVE

DISCUSSION

5.0 Introduction

This chapter discusses the findings of the study. The study shows that competency and awareness on mental disorders among police officers was generally low. The study explored awareness and competency of mental disorders, which includes being aware and competent of common mental disorders, knowledge of symptoms of mental disorders and knowledge of risk associated with handling of people with mental disorders. The findings of the study indicate that there is low level of awareness and competency on mental disorders among police officers in Accra Metropolis.

5.1 Awareness and competency of Mental Disorders

The study of the national SWAT police unit revealed that only a small proportion (9.5%) of police officers were aware of all the types of mental disorders commonly diagnosed in Ghana. This finding is contrary to a study conducted in the United Kingdom (UK) which found that only 10.9% police were not aware of people suffering from mental disorders (Lynch, Simpson, Higson, & Grout, 2002). There is a great contrast between the two studies because there are no training programs or models on mental health for the Ghana police officers as it is done in the UK. The finding is however similar to studies about knowledge of mental disorders in the general public that stated that majority of the public cannot identify mental disorders correctly and do not understand the meaning of psychiatric terms; only 27% of Australian public were able to recognise schizophrenia correctly by (Jorm, 2000). The level of awareness and competency among Ghana police officers is even lower than that of members of Australian public because they were not given any psychiatric

training. This is evident in the findings as almost all officers (99%) had never received psychiatric training and only 4.5% of officers had ever undergone any medical training as shown in figure 3. This is totally different from the developed countries where there are training programs such as Behaviour Emergency Service Team (B.E.S.T) training, Crisis Intervention Team (CIT) training, Training and Education about Mental illness for Police Officers (TEMPO) etc. organised for police officers. According to Telle et al, (2006), there are regular trainings known as Crisis Interventions Team (CIT) training programs are organised for police officers in the United States (Teller et al., 2006).

5.1.1 Awareness and competency of Drug/substance abuse and Self-harm/ suicide

Even though the general level of awareness and competency of mental disorders among the study participants was very low, the level of awareness and competency of some types of mental disorders was very high. There was a high level awareness and competency of drug/substance abuse among officers. Majority (80%) of officers had ever heard of drug/substance abuse. This is similar to a study that was carried out in England among police officers. The findings of the study revealed less than half (45%) of police officers were aware of mental health disorders (Pinfold et al., 2003). The results of this study further agree with the finding of a similar study conducted in three Yoruba speaking states in south-western Nigeria, reported that Most respondents expressed view that substance misuse could result in mental illness (Gureje et al., 2005).

The SWAT police officers admitted that they have ever heard of drug/substance abuse but they did not know much about it. Also, high level of awareness and competency

regarding self-harm or suicide was observed among police officers, with 79% of officers responding that they had ever heard of it.

5.1.2 Awareness and competency of Depression and Epilepsy

The officers responded positively to depression as 64% have ever heard of depression. This supports the findings of a study carried out in a rural area of Liuyang County, China that about 60% of the respondents correctly attributed the vignettes of depression and anxiety as mental problems (Yu et al., 2016).

The study results showed that quite a good number of officers (76%) have ever heard of epilepsy. There are high level of awareness and competency of depression and epilepsy because these psychiatric terms are used on daily basis by the general public either knowingly or unknowingly.

5.1.3 Awareness and competency of Schizophrenia and psychosis

Majority of the SWAT officers (91%) have never heard of schizophrenia and this is due the fact that schizophrenia is a psychiatric term and not commonly used by the general public on a daily basis. The finding of this study is entirely different from the findings of Compton et al. (2006) among police officers in Georgia. The study reported that 42% of officers have ever known someone with schizophrenia (Compton, Esterberg, McGee, Kotwicki, & Oliva, 2006). The findings of the study also revealed that 82% of officers have never heard of the type of mental disorder psychosis. This is also not in line with the assertion that 97% of respondents of a study from France, were able recognise the term schizophrenia (Durand-Zaleski, et al., 2012).

Though very few (16%) of those who have ever heard of psychosis, do not know much about the psychiatric term psychosis.

5.1.4 Awareness and competency of Personality and Mood Disorders

The level of awareness of personality disorder among SWAT officers is slightly higher than that of schizophrenia, psychosis and mood disorder. About 64% have never heard of personality disorder and this does not agree with the findings of the study by Huxley, et al., (2003) among police officers in England which revealed that 43% of officers rated themselves poorly on knowledge of mental illness (Pinfold et al., 2003). Similarly, more than three quarters of the officers have never heard of mood disorder in their lives.

5.2 Knowledge of symptoms of mental disorders

The findings of the study revealed the SWAT police officers are limited in knowledge of symptoms of mental disorders. Majority (97%) of officers were unable to mention any symptom of all the types of mental disorders commonly diagnosed in Ghana though a good proportion of officers were aware and competent of some types of disorders. The findings of this study showed low level of knowledge on type of mental disorders when compared to similar studies conducted among members of the general public. The findings of this study is contrary to a study by Wolff et al. (1996), which was carried out among the general public in the UK and 19% of respondents could describe one type of mental disorder correctly (Wolff, Pathare, Craig, & Leff, 1996). Also a higher level of knowledge of mental disorders than the findings of this study has also been reported in a study among members of public in France, about 17 % of respondents could identify the estimated prevalence(21%-30%) of mental

disorders (Durand-Zaleski et al., 2012). The poor knowledge and competency of mental disorders among officers could be attributed to the fact that there are no training programs on mental disorders for the Ghanaian police officers. TEMPO report 2014 suggested that training programs on mental disorders should be organised for all police officers; to equip them with sufficient knowledge and skills to manage and handle people with mental crisis (Coleman & Cotton, 2014).

5.3 Knowledge and competency of risk factors associated with handling people with mental disorders

The results show most officers did not have knowledge and competency of risk factors associated with handling people with mental disorders. This does not agree with the findings of a study from Canada, which reported that most police officers were well aware of the obvious signs and symptoms of mental illness and they were aware of practical strategies and skills that they would use when dealing with people with mental illness (Cotton & Coleman, 2010).

People with mental disorders can sometimes be very dangerous to handle. One of the objectives of this study sought to find the level of knowledge officers have on risk factors associated with handling people with mental disorders.

From this study, it can be said that officers had little knowledge regarding risk factors associated with handling people with mental disorders. Most of the officers could not mention any risk factor, while few officers were able to mention at most two risk factors.

5.4 Participants characteristics

This section explained the findings on background characteristics of officers and their relationship to level of awareness of mental disorders. Officers' level of education proved to be significant predictors of awareness and competency of mental disorders in this study. Officers with tertiary education were about 64 times more likely to have ever heard of drug/substance abuse compared to those with middle/JHS education. This could be due to the fact that officers with tertiary education are likely to be exposed to psychiatric terms more than those with middle/JHS education.

In this study, the officers' awareness and competency level was found not to be the influence of service experience, level of training, rank or age. This contradicts the findings by Ganesh. (2011), where respondents who aged less than 30 years had more knowledge compared to those who aged more than 30 years of age; this however supports the assertion that male respondents had significantly more knowledge regarding mental illness compared to female respondents (Ganesh, 2011).



CHAPTER SIX

CONCLUSIONS AND RECOMMENDATIONS

6.1 Conclusions

This study revealed low level of general awareness and competency of mental disorders among SWAT police officers in the Accra Metropolis, although majority of the officers had ever heard of some particular type of mental disorders. The majority of the study participants did not understand the psychiatric term “mental disorder” and the symptoms associated with mental disorders. They had low level of knowledge and competency about the risk factors associated with handling people with mental disorders.

Only a few were able to mention some risk factors associated with handling people with mental disorders. This show that majority of officers do not have much knowledge of mental disorders.

From the above discussion, it can be concluded that training models on mental health play a significant role in increasing awareness and competency of mental disorders among police officers. If they are aware of mental disorders, they will be able manage people in mental crisis.

6.2 Recommendations

6.2.1 Training

The study revealed a low level of awareness and competency on mental disorders among police officers and therefore, emphasis must be given to training police officers on mental disorders and mental health in the police training colleges. The Ghana Police Service should organise training models or programs on mental health and management of people with mental disorders. There should be regular on the job

training and refresher trainings for officers in order to maintain up to date knowledge of mental issues.

6.2.2 Policy

Based on the findings of the study, police officers have limited knowledge on mental health issues and this has policy implication on the Ghana Police service. Officers are exposed to many challenges as they encounter general public including people with mental disorders on daily basis and yet there is no training curriculum on mental health included in recruitment and training of officers. The WHO recommends that the workforce that handle and provide care for people in mental crisis should be given the necessary knowledge and skills. This means that there should be skills training for the workforce that handle or provide services for people with mental disorders. The policy should include the security services such as police, prisons etc. in the training. There is the need for the Ghana mental Health Act to update to incorporate public education and awareness campaigns including security service such as police, prisons etc. on mental health in the Act. Public education is key to increase acceptance of mentally ill persons back to the community for rehabilitation.

6.2.3 Research

Finally, stakeholders should prioritize large studies tracking police awareness and competency on mental disorders should be conducted regularly, in order to expose the shortcomings in knowledge among officers regarding people with mental disorders. This will provide grounds for policy makers to revise policies on mental health and the security services.

REFERENCES

- Adelman, J. (2003). *Study in Blue and Grey: Police Interventions with People with Mental Illness: A Review of Challenges and Responses*.
- Alex, R., Singh, U., Alyethodi, R. R., & Deb, R. (2013). Review Article, Health promotion as part of a holistic approach to Community Mental health. *Sierra Leone Journal of Biomedical Research*, 5(1), 34–43.
- American Psychiatric Association. (2013). *Diagnostic and Statistical Manual of Mental Disorders*. Arlington. <http://doi.org/10.1176/appi.books.9780890425596.744053>
- Aning, E. K. (2006). An Overview Of The Ghana Police Service.
- Association of Chief Police Officers. (2009). Police and Mental Health; How to get it right locally.
- Association of Chief Police Officers. (2013). Police and mental health: How to get it right locally. Retrieved from http://www.mind.org.uk/media/618027/2013-12-03-Mind_police_final_web.pdf
- Bhui, K., Warfa, N., Edonya, P., Mckenzie, K., & Bhugra, D. (2007). Cultural competence in mental health care: a review of model evaluations, 10. <http://doi.org/10.1186/1472-6963-7-15>
- Borum, R. (1998). Police perspectives on responding to mentally ill people in crisis : Perceptions of program effectiveness. *Mental Health Law & Policy Faculty Publications*, (January), 393–405.
- Borum, R. (2000). Improving high risk encounters between people with mental illness and police. *J Am Acad Psychiatry Law*, 28, 332–337.
- Bradley, Lord. (2009a). The Bradley, (April), The Bradley Report.
- Bradley, Lord. (2009b). *The Bradley Report, Lord Badley's review of people mental health problems or learning disabilities in the criminal justice system*.
- Brooker, C., & Sirdifield, C. (2009). An Evaluation of Mental Health Awareness Training for Probation Staff, (April).
- Cardinal, C., & Laberge, D. (1999). The police and mental health services. *Sante Mentale Au Quebec*, 24(1), 199–220.
- Centre for Addiction and Mental Health. (2013). Mental Health and Criminal Justice Policy Framework.
- Coleman, T., & Cotton, D. (2010). Police interactions with persons with a mental illness: Police learning in the environment of contemporary policing. *Vasa*,

(May).

- Coleman, T., & Cotton, D. (2014). TEMPO: Police Interactions a report towards improving interactions between police and people living with mental health problems, (June), 94. Retrieved from www.mentalhealthcommission.ca
- Commission Mental Health. (2009). Report of Joint Working Group on Mental Health Services and the Police 2009.
- Compton, M. T., Esterberg, M. L., McGee, R., Kotwicky, R. J., & Oliva, J. R. (2006). Brief reports: crisis intervention team training: changes in knowledge, attitudes, and stigma related to schizophrenia. *Psychiatric Services (Washington, D.C.)*, 57(8), 1199–1202. <http://doi.org/10.1176/appi.ps.57.8.1199>
- Cotton, D., & Coleman, T. G. (2010). Canadian police agencies and their interactions with persons with a mental illness: a systems approach, 4263. <http://doi.org/10.1080/15614261003701665>
- Cummings, I., Jones, S., Bradley, T., & Bradley, R. (2010). Blue remembered skills: mental health awareness training for police officers, 12(3), 14–19.
- Dees, T. (2016). How to Become a SWAT Officer _ SWAT Team Requirements. Retrieved July 19, 2016, from <http://www.innerbody.com/careers-in-criminal-justice/how-to-become-a-swat-officer.html>
- Doku, V. C. K., Wusu-Takyi, a, & Awakame, J. (2012). Implementing the Mental Health Act in Ghana: any challenges ahead? *Ghana Medical Journal*, 46(4), 241–50. Retrieved from <http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=3645169&tool=pmcentrez&rendertype=abstract>
- Dougall, S. C., & Dougall, S. (2014). Response to mental health calls: The frontline perspectives of police officers, communicators and administrators by.
- Durand-Zaleski, I., Scott, J., Rouillon, F., & Leboyer, M. (2012). A first national survey of knowledge, attitudes and behaviours towards schizophrenia, bipolar disorders and autism in France. *BMC Psychiatry*, 12, 128. <http://doi.org/10.1186/1471-244x-12-128>
- Fletcher, M. N. (2014). Cultural Competency in Law Enforcement: Assessing Cultural Competence Levels among College Campus Police Departments.
- Forchuk, C., Jensen, E., Martin, M. Lou, Csiernik, R., & Atyeo, H. (2010). Psychiatric crisis services in three communities. *Canadian Journal of Community Mental Health*, 29(October 2015), 73–86. <http://doi.org/10.7870/cjcmh-2010-0035>
- Friedli, L. (2005). Investing in mental health. *Mental Health Today (Brighton, England)*, 16–18.

- Ganesh, K. (2011). Knowledge and Attitude of Mental Illness among General Public of Southern India. *National Journal of Community Medicine*, 2(1), 175–178.
- Ghana Statistical Service. (2014). National Population Projection 2010 to 2014. [Internet]. Retrieved from [http://www.statsghana.gov.gh/docfiles/2010phc/National Population Projection_2010 to 2014.pdf](http://www.statsghana.gov.gh/docfiles/2010phc/National%20Population%20Projection_2010%20to%202014.pdf)
- Glick, B. (2006). Cultural Competency Standards for Programs Serving Victims of Domestic Violence and Sexual Assault and Crimes in Oregon.
- Government of Ghana E-services. (2016). Ghana Police Service-Home; online portal for the Ghana Police Service. Retrieved July 16, 2016, from <http://www.eservices.gov.gh/gps/SitePages/GPS-Home.aspx>
- Gureje, O. Y. E., Lasebikan, V. O., Ephraim-oluwanuga, O., Oluwanuga, E. A., Olley, B. O., & Kola, L. (2005). Community study of knowledge of and attitude to mental illness in Nigeria. *The British Journal of Psychiatry: The Journal of Mental Science*, 186, 436–441.
- Ibrahim, A., Esena, R. K., Aikins, M., O’Keefe, A. M., & McKay, M. M. (2015). Assessment of mental distress among prison inmates in Ghana’s correctional system: a cross-sectional study using the Kessler Psychological Distress Scale. *International Journal of Mental Health Systems*, 9(1), 17. <http://doi.org/10.1186/s13033-015-0011-0>
- Jorm, A. F. (2000). Mental health literacy: Public knowledge and beliefs about mental disorders. *British Journal of Psychiatry*, 177(NOV.), 396–401. <http://doi.org/10.1192/bjp.177.5.396>
- Kakuma, R., Kleintjes, S., Lund, C., Drew, N., Green, a, & Flisher, a J. (2010). Mental Health Stigma: What is being done to raise awareness and reduce stigma in South Africa? *African Journal of Psychiatry*, 13(2), 116–124. <http://doi.org/10.4314/ajpsy.v13i2.54357>
- Lazarus, R., & Freeman, M. (2009). Primary-Level Mental Health Care for Common Mental Disorders in Resource-Poor Settings: Models & Practice a Literature Review. Sexual Violence Research Initiative, Medical Research Council, Pretoria, South Africa.
- Lynch, R. M., Simpson, M., Higson, M., & Grout, P. (2002). Section 136, The Mental Health Act 1983; levels of knowledge among accident and emergency doctors, senior nurses, and police constables. *Emergency Medicine Journal*, 19(4), 295–300. <http://doi.org/10.1136/emj.19.4.295>
- Mason, J. L. (1995). Cultural competence self-assessment questionnaire: A manual for users. Portland, OR: Portland State University, Research and Training Center on Family Support and Children’s Mental Health., 0751(503).

- Mayhew, C., & Graycar, A. (1996). Occupational Health and Safety Risks Faced by Police Officers in crime and criminal justice, (196).
- Melissa A. Cortina, DPhil; Anisha Sodha, MBBCh; Mina Fazel, DM; Paul G. Ramchandani, Mrcp. (2012). Prevalence of Child Mental Health Problems in Sub-Saharan Africa, *166*(3), 276–281.
- Omoaregba, J. O., James, B. O., Igbinowanhia, N. G., & Akhiwu, W. O. (2015). The Attitudes of the Police towards Persons with Mental Illness : A Cross-sectional Study from Benin City , Nigeria, *3*(3), 57–61. <http://doi.org/10.12691/ajap-3-3-2>
- Pinfold, V., Huxley, P., Thornicroft, G., Farmer, P., Toulmin, H., & Graham, T. (2003). ORIGINAL PAPER Reducing psychiatric stigma and discrimination Evaluating an educational intervention with the police force in England, 337–344. <http://doi.org/10.1007/s00127-003-0641-4>
- Roberts, M., Asare, B. J., Mogan, C., Adjase, T. E., & Osei, A. (2013). *The mental health system in Ghana. Full Report; Based on a survey conducted in 2012 using the World Health Organisation Assessment Instrument for Mental Health Systems (WHO-AIMS) for the year 2011.*
- Silverstone, P. H., Kraneddine, Y. I., DeMarco, D., and Hassel, R. (2013). A Novel Approach to Training Police Officers to Interact With Individuals Who May Have a Psychiatric Disorder. *J Am Acad Psychiatry Law*, *41*, 344–55.
- Sorfleet, K. M. (2012). Improving Interactions between the Police and People Living with Mental Illness by.
- Teller, J. L. S., Munetz, M. R., Gil, K. M., & Ritter, C. (2006). Crisis intervention team training for police officers responding to mental disturbance calls. *Psychiatric Services (Washington, D.C.)*, *57*(2), 232–237. <http://doi.org/10.1176/appi.ps.57.2.232>
- Uys, L. R., & Middleton, L. E. (2012). A comparative study of mental health services in two African countries : South Africa and Nigeria, *4*(May), 50–57. <http://doi.org/10.5897/IJNM12.002>
- Vermette, H. S., Pinals, D. A., & Appelbaum, P. S. (2005). Mental Health Training for Law Enforcement Professionals. *J Am Acad Psychiatry Law*, *33*(1), 42–46. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/15809237> \n <http://www.jaapl.org/cgi/content/abstract/33/1/42>
- Watson, A. C., Corrigan, P. W., & Ottati, V. (2004). Police responses to persons with mental illness: does the label matter? *The Journal of the American Academy of Psychiatry and the Law*, *32*(4), 378–385.
- Watson, A. C., Morabito, M. S., & Ottati, V. (2009). Improving police response to

- persons with mental illness: A Multilevel conceptualization of CIT, *31*(4), 359–368. <http://doi.org/10.1016/j.ijlp.2008.06.004>. Improving
- Watson, A. C., Swartz, J., Bohrman, C., Kriegel, L. S., & Draine, J. (2014). International Journal of Law and Psychiatry Understanding how police officers think about mental / emotional disturbance calls. *International Journal of Law and Psychiatry*, *37*(4), 351–358. <http://doi.org/10.1016/j.ijlp.2014.02.005>
- Whiteford, H. (2010). The Global Burden of Mental & Substance Use Disorders Findings from the Global Burden of Disease Study Outline.
- Wolff, G., Pathare, S., Craig, T., & Leff, J. (1996). Community knowledge of mental illness and reaction to mentally ill people. *British Journal of Psychiatry*, *168*(FEB.), 191–198. <http://doi.org/10.1192/bjp.168.2.191>
- World Health Assembly. (2012). The global burden of mental disorders and the need for a comprehensive , coordinated response from health and social sectors at the country level.
- World Health Organization. (2006). WHO-AIMS Report on Mental Health System in Nigeria, WHO and Ministry of Health, Ibadan, Nigeria.
- World Health Organization. (2007). WHO-AIMS Report on Mental Health System in Ghana, A very progressive mental health law.
- World Health Organization. (2007). WHO-AIMS Report on Mental Health System in South Africa, WHO and Department of Psychiatry and Mental Health, University of Cape Town, Cape Town, South Africa.
- World Health Organization. (2010). mhGAP intervention guide - For mental, neurological and substance abuse disorders in non-specialized health settings. *Mental Health Gap Action Programme*, 1–121. Retrieved from <http://scholar.google.com/scholar?hl=en&btnG=Search&q=intitle:mhGAP+Intervention+Guide#1> \n <http://scholar.google.com/scholar?hl=en&btnG=Search&q=intitle:mhGAP+intervention+guide#1>
- World Health Organization. (2011). WHO-AIMS Report on Mental Health System in Ghana.
- World Health Organization. (2013). Mental Health Action Plan 2013-2020. *WHO Library Cataloguing-in-Publication DataLibrary Cataloguing-in-Publication Data*, 1–44. Retrieved from http://apps.who.int/iris/bitstream/10665/89966/1/9789241506021_eng.pdf?ua=1 \n http://apps.who.int/iris/bitstream/10665/89966/1/9789241506021_eng.pdf
- Yu, Y., Hu, M., Liu, Z., Liu, H., Yang, J. P., Zhou, L., & Xiao, S. (2016). Recognition of depression , anxiety , and alcohol abuse in a Chinese rural sample : a cross-sectional study, 1–9. <http://doi.org/10.1186/s12888-016-0802-0>

APPENDICES

Appendix I: Participant Consent Form for Police Officers

School of Public Health
College of Health Sciences
University of Ghana

Project title

AN EXPLORATORY STUDY ON LEVEL OF COMPETENCY ON MENTAL DISORDERS AMONG POLICE OFFICERS' SWAT UNIT IN THE ACCRA METROPOLIS

Name and address of Principal Investigator

Awini Simon Asaman, Department of Health Policy, Planning and Management,
University of Ghana, Accra, Legon. Mobile: 0264703705/0246737986/0202438567

Email Address: winisims@yahoo.com

Institution affiliated

School of Public Health, University of Ghana, Legon, Accra

Introduction

I am a Master of Public Health (MPH) student from the School of Public Health, University of Ghana, conducting a research on competency level on mental disorders. I would like to take about 15 minutes of your time and ask you a few questions regarding your knowledge which may help improve service delivery. Issues to be covered will include knowledge on symptoms of mental illness and risk factors associated with mental illness. All information collected will be treated as confidential and no one will be able to trace any information back to you.

Procedure

The study is targeted to all police officers in the SWAT unit. It involve questions and responses. Questions to be asked will include information about your background characteristics, knowledge about symptoms of mental illness and risk factors associated with mental illness etc. Data collection is purely by interviews to ascertain the competency on mental disorders.

Risks and benefits

You may feel uncomfortable with some of the questions I will be asking you; however, they will be helpful to me, other researches, the police service and providers of healthcare.

Anonymity and confidentiality

Please be assured that any information given will be used purely for the purpose of research. Any information given will be treated with utmost confidentiality. Your name will not be used in any report, but your ideas and suggestions will help us to design a program that will improve the competency on mental disorders among officers in Ghana police service.

Your rights as a Participant

This research has been reviewed and approved by the Ethical Review Committee of the Ghana Health Service. If you have any questions about your rights as a research participant you can contact the Ethical Review Coordinator on 0302681109 (Ms. Hannah Frimpong).

Do you have any questions to ask me? (If yes, note questions below)

Voluntary agreement form for police officers

The above document describing the benefits, risks and procedures for the research topic “An Exploratory Study of Competency on Mental Disorders among Police

Officers in SWAT Unit in Accra Metropolis” has been read and explained to me in English that I can understand. I have been given an opportunity to ask any questions about the research. I agree to participate as a participant.

Name.....Date.....

Signature/thumbprint.....

If participants cannot read the form themselves, a witness must sign here:

I was present while the benefits, risks and procedures were read to the participant. All questions were answered and the participant has agreed to take part in the research.

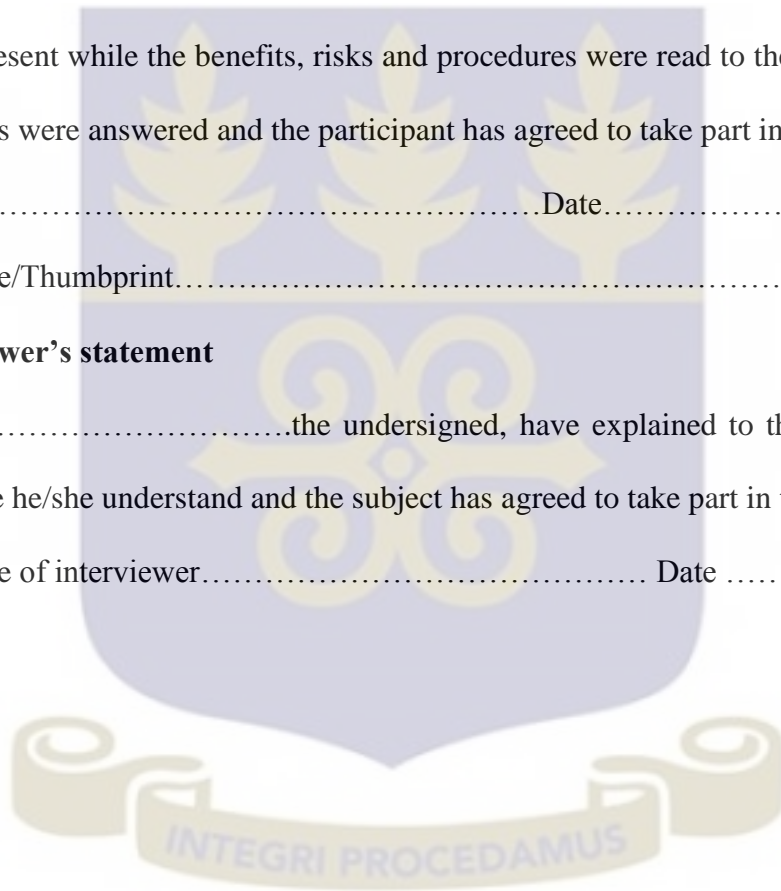
Name.....Date.....

Signature/Thumbprint.....

Interviewer’s statement

I.....the undersigned, have explained to the subject in the language he/she understand and the subject has agreed to take part in the study.

Signature of interviewer..... Date



Appendix II: Questionnaire

A. BACKGROUND INFORMATION		
	Question	Response
		Please tick the appropriate response
1	What's your sex?	Male 01 <input type="checkbox"/> Female 02 <input type="checkbox"/>
2	What is your highest level of education attained?	Middle/JSS 01 <input type="checkbox"/> Secondary/SSS 02 <input type="checkbox"/> Tertiary 03 <input type="checkbox"/> Other (specific) 04 <input type="checkbox"/>
3	What is your age group	18-29 01 <input type="checkbox"/> 30-49 02 <input type="checkbox"/> 50-60 03 <input type="checkbox"/> More than 60 04 <input type="checkbox"/>
4	What is your marital status?	Married 01 <input type="checkbox"/> Single 02 <input type="checkbox"/> Divorced/separated 03 <input type="checkbox"/> Widowed 04 <input type="checkbox"/>
5	What is your religion?	Christianity 01 <input type="checkbox"/> Islamic 02 <input type="checkbox"/> African Traditional Religion 03 <input type="checkbox"/> Other specify.....
B.ACTIVE SERVICE INFORMATION		
6	Date of recruitment or employment into the	Month/ year

	Ghana police service
7	Please indicate your level of training with the Ghana Police Service? (<i>Choose more than one option if it applies to you</i>)	Basic Training <input type="checkbox"/> Under cadet <input type="checkbox"/> Junior command course <input type="checkbox"/> Senior command course <input type="checkbox"/>
8	Please indicate your current rank and the number of years you have served on this rank?	Rank..... Years on this rank.....
C. AWARENESS AND KNOWLEDGE ON MENTAL DISORDERS		
	Question	Please write appropriate responses
9	Have you had any prior medical training (e.g. medical doctor, pharmacist or nurse, etc.)?	Yes 01 <input type="checkbox"/> No (Skip to Q.11) 02 <input type="checkbox"/>
10	Have you ever had psychiatric training or taken any course in psychiatry?	Yes 01 <input type="checkbox"/> No 02 <input type="checkbox"/>
11	Are you aware of any mental health facilities/hospitals in Ghana?	Yes 01 <input type="checkbox"/> No 02 <input type="checkbox"/>
12	If yes, please provide their names
13	To what extent have you interacted with the mental health facilities/hospitals in Ghana?	Very much 01 <input type="checkbox"/> Sometimes 02 <input type="checkbox"/> Very rarely 03 <input type="checkbox"/> Not at all 04 <input type="checkbox"/>
14	During your years of service, have you ever	Yes 01 <input type="checkbox"/>

	accompanied any person with mental disorders to the mental health facilities/hospitals for treatment	No	02	<input type="checkbox"/>
15	If yes, indicate how you got him/her to the mental health facility/hospital	Police vehicle	01	<input type="checkbox"/>
		Taxi	02	<input type="checkbox"/>
		Private car	03	<input type="checkbox"/>
		Others(specify)	04	<input type="checkbox"/>
16	Have you ever heard of schizophrenia?	Yes	01	<input type="checkbox"/>
		No	02	<input type="checkbox"/>
		If no go to Q or 18?		
17	Please describe any two signs/symptoms of schizophrenia		
18	Can you briefly describe or mention two signs or symptoms of delusion	1..... 2.....		
19	Have you ever heard of depression?	Yes	01	<input type="checkbox"/>
		No	02	<input type="checkbox"/>
		If No, go to Q21		
20	What are some common symptoms that patients experience when affected by depression? (Any two)		

21	Have you ever heard of Psychosis?	Yes 01 <input type="checkbox"/> No 02 <input type="checkbox"/> If No go to Q 23
22	Can you describe two main sign(s) or symptom(s) that best describe or explain Psychosis?	1..... 2.....
23	Have you ever heard of epilepsy?	Yes 01 <input type="checkbox"/> No 02 <input type="checkbox"/> If No go to Q25
24	Can you describe two signs/symptoms that best describe or explain epilepsy	1..... 2.....
25	Have you ever heard of Drug abuse/substance abuse disorders?	Yes 01 <input type="checkbox"/> No 02 <input type="checkbox"/> If no, go to Q27
26	Can you briefly describe any two sign(s) or symptom(s) that best describe or explain substance abuse disorder
27	Have you ever heard of personality disorders?	1.Yes 01 <input type="checkbox"/> 2. No 02 <input type="checkbox"/> If No go to Q29
28	Can you briefly describe or explain any two signs or symptoms of personality disorders
29	Have you ever heard of Self-harm or Suicide?	Yes 01 <input type="checkbox"/> No 02 <input type="checkbox"/> If No, go to Q31

30	Please mention any two main signs and symptoms of a person at risk of suicide?	1..... 2.....
31	Have you ever heard of mood disorder?	Yes <input type="checkbox"/> No <input type="checkbox"/>
32	Please describe any two sign(s) or symptoms that best explain or describe mood disorders
33	Are you aware of the top ten mental disorders commonly diagnosed in Ghana?	Yes 01 <input type="checkbox"/> No Skip to Q. 35 02 <input type="checkbox"/>
34	Mention any five mental disorders diagnosed in Ghana	1..... 2..... 3..... 4..... 5.....
D. DATA ON RISK FACTORS ASSOCIATED WITH HANDLING PEOPLE WITH MENTAL HEALTH DISORDERS		
35	Please mention five (5) risk factors associated with the handling of people with mental health disorders?	1. 2. 3. 4. 5.

36	Indicate true or false if the following behaviours or actions are associated with people with mental health disorders	<p style="text-align: right;">True/False</p> <p>Has been physically cruel to people. <input type="checkbox"/> <input type="checkbox"/></p> <p>Has forced someone into sexual activity. <input type="checkbox"/> <input type="checkbox"/></p>
----	---	--

